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ABSTRACT

This module on developing and using learning centers in the classroom was developed in response to interest voiced by teachers and assistant teachers in Mississippi. Intended to accompany assistant teacher staff development videotapes, the information included in the module is in handout form to be disseminated to the participants by the workshop leader as it is discussed. The patterns and instructions for constructing games (Appendix A-D) for four learning centers contained in this module--Clowning into Reading, the Reading Farm, Circus Math, and Math Zoo--are designed for use during the second semester of the first grade and the entire second grade but may be adjusted to teach or reinforce any concept in any subject area. A supervisor's evaluation instrument has been included. Appendices E (Materials Needed) and F (Bibliography) provide the leader with added resource information to use before conducting the workshop sessions. (DST)

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DEVELOPMENT AND UTILIZATION OF LEARNING CENTERS IN THE CLASSROOM

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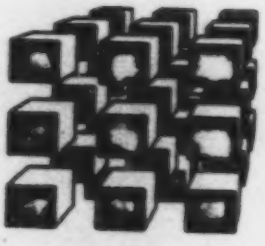

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DEVELOPMENT AND UTILIZATION OF LEARNING CENTERS IN THE CLASSROOM

TEACHER/ASSISTANT TEACHER STAFF DEVELOPMENT MATERIALS

DIVISION OF INSTRUCTION

MISSISSIPPI STATE DEPARTMENT OF EDUCATION

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OVERVIEW

This module on the development and utilization of learning centers in the classroom has been developed in response to an interest voiced by teachers and assistant teachers throughout the state. Results of district needs assessments indicate this topic is a priority as teachers are beginning to incorporate this teaching technique into the daily classroom routine. Videotape segments five (5) and six (6)(tape 2) of the assistant teacher staff development training tapes developed last year by the State Department of Education and corresponding handout material (pages 38-51)in the accompanying manual (blue manual) should be reviewed with participants prior to presenting this information. The patterns and instructions for the construction of games (Appendix A-D) contained in this module are designed for use during the second semester of the first grade and the entire second grade, but may be adjusted to teach or reinforce any concept in any subject area. The complexity of the concept presented should relate directly to the ability and needs of the student.

The information included in the module is in handout form to be disseminated to the participants by the leader as it is discussed through workshop formats with teachers and assistant teachers. Presented are a list of concepts that should be developed by the leader in the workshop sessions as well as preview and follow-up questions. The appendices contain directions and patterns for four learning centers with the intent being that following presentation and discussion of the handout material a teacher/assistant teacher work session will be scheduled so materials may be constructed for classroom utilization.

A supervisor's evaluation instrument has been included as a method of determining the effectiveness of the workshop presentations. When faculty or staff behaviors are observed that indicate weaknesses in the development, management, and instructional techniques with regard to learning centers, it is intended that specific components of this series be repeated on a small group or individual basis with those teachers or assistant teachers in need.

Appendices E and F provide the leader with added resource information to utilize prior to conducting the workshop sessions. Purchasing of resource books is encouraged to allow teachers an opportunity to develop additional learning centers should they wish.

CONCEPTS TO BE DEVELOPED

1. A learning center is a designated area of the classroom that contains a variety of instructional activities and materials which focus on a topic, theme, concept, or skill.

2. Successful learning centers require careful planning, creative development, and constant modification.

3. Rules must be established for learning centers to be successfully utilized by students.

4. Learning center utilization by students helps develop responsibility and independence with regard to their work habits.

5. Use of learning centers in the classroom assists students in developing thought processes which lead to higher level cognitive skills.

6. The assistant teacher may be utilized in the development, instruction, and classroom management regarding learning centers in the classroom.

(Leader's Copy)

PREVIEW QUESTIONS

1. What are learning centers?

2. Why should learning centers be used in the classroom?

3. How can learning centers be incorporated into the instructional use of a basal reading or math series since basals serve as the primary source of instructional information?

4. How are students taught to use the learning centers?

5. How can the assistant teacher facilitate the use of learning centers in the classroom?

DEFINING AND DEVELOPING LEARNING CENTERS

A learning center is a designated area of the classroom that contains a variety of instructional activities and materials which focus on a topic, theme, concept, or skill. The purpose of the learning center can be to introduce, develop, explore, or stimulate the reinforcement and enrichment of concepts and skills. A center may be classified as the availability of one activity or the provision of a multitude of activities centered around one concept. They provide activities that accommodate different interests and learning styles. If properly constructed, centers provide opportunities for individuals or small groups of students to work independently with a minimum of teacher supervision. Learning centers should encourage self-selection, self-direction, exploration, and motivation.

Developing Learning Centers

Precise preplanning is essential for developing effective and stimulating learning centers. This involves:

1. selection of the area of concentration
2. defining specific learning objectives for the center
3. conducting a student needs assessment to determine the range of activities which must be provided to meet each child's needs
4. choosing an appropriate location for the center.

With the above accomplished, selection and construction of learning activities becomes the next consideration. Activities must be attractive, inviting, and easily accessible to the children. Color, creativity, and imaginative arrangements will motivate student use. The arrangement of the center should be practical and exciting. New materials and activities which relate to the learning center should be added to the centers as student interest and needs occur. New centers may be initiated by the teacher, a single child, or a group of children. Children may set up a center or change

a center as the result of a field trip, holiday, or special event. Children are initiating a center when they come and ask the teacher's permission to engage in activities that are not included in the teacher's preplanning. These centers usually remain only as long as the children's interest is active.

LEARNING CENTERS AND CLASSROOM ARRANGEMENT

Rationale

Learning centers are vehicles for incorporating learning with pleasurable activities that are appealing to children. Some interest centers are basic and will be available the entire year; other centers are created as the need or interest arises.

Learning centers are used for the following reasons:

1. they are exciting to the child
2. they arouse his natural curiosity
3. they accommodate individual needs
4. they encourage the child to share responsibility for his learning
5. they give opportunities to make choices and decisions
6. they encourage peer learning and cooperation.

How to Begin

Successful learning centers require careful planning, creative development, and constant modification. The teacher who is unsure of how to develop learning centers for her classroom should plan to devote some time to:

1. reading books and articles about learning centers
2. visiting classrooms which utilize learning centers
3. interviewing experienced teachers and college/university teacher training professionals concerning student management skills and learning centers.

After gathering this information, the teacher may begin to plan and organize learning centers for her classroom. An important rule to remember is: Start Gradually. Expand and build your centers as you recognize the children's level of operation, incorporating the children's interests and ideas.

Classroom Layout

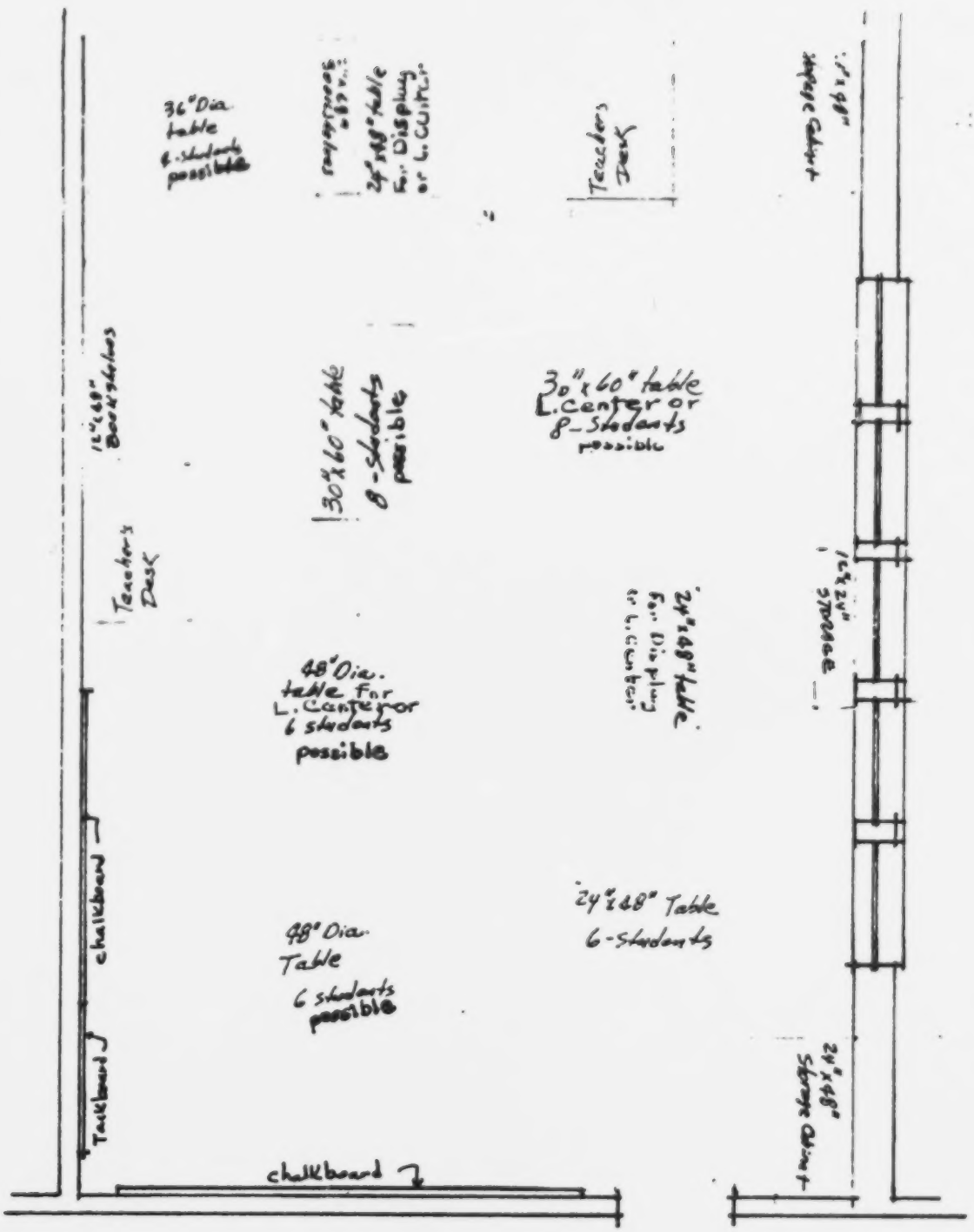
Organizing a classroom with learning centers involves planning for space, movement, materials, and traffic. Physical facilities will determine the amount and permanence of the several learning centers in the classroom. One

way to solve this problem is to make some centers "portable"--that is have materials conveniently stored so the center can be arranged in a matter of a few seconds.

Some other features to keep in mind when planning the organization of the learning centers are:

1. Create clear traffic lanes for movement. This insures a child does not disrupt others as he changes activities.
2. Group noisy and quiet areas so that they do not conflict.
3. Locate activities requiring water near a sink or water source. Avoid carrying water across the room.
4. Plan for space that can be used for large group activities. This space could also be used for a learning center during center activity time.
5. Use shelves, dividers, or center furniture to outline learning center areas.

The following diagram of a classroom suggests some ways the learning centers may be arranged.


36" Dia. table 6 students possible
Teachers Desk
30" x 60" table L. center or 8-Students possible
Teachers Desk
48" Dia. table For L. Center or 6 students possible
24" x 48" table For Display or L. Counter
48" Dia. Table 6 students possible
24" x 48" Table 6-Students
chalkboard
chalkboard
chalkboard

TYPICAL 20' x 30' (600 SQ. FT.) CLASSROOM SCALE 1/4" = 1'-0"

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MANAGING LEARNING CENTERS IN THE CLASSROOM

When a teacher introduces learning centers into his/her classroom, he/she needs to become a very good organizer and manager. Unless the teacher has a clear idea of the overall plan, it is easy to become confused or frustrated. Working out simple management systems, responsibilities, and rules in advance will prevent this from happening. Most of all, the teacher must have confidence that the use of learning centers will be successful. As in all things, there may be some days that do not go as smoothly as others, but, the more experience the teacher and children have with the learning centers, the better the chances are that the routine will go smoothly.

It is important to set ground rules for children's behaviors. The fewer ground rules needed, the better, but some limits will need to be developed and discussed with the children.

Following are some suggested rules.

The child should:

- work at the center he/she selected
- take responsibility for returning materials to the proper place
- leave materials at the center ready for use by next participants
- seek assistance from another child or adult if help is needed
- finish work at one center before selecting another center
- modify tone of voice when working at a quiet center.

Whatever rules are established the children might be reminded of them often during the first few weeks and then occasionally or as need arises periodically. Children do forget. In the excitement of an activity, they forget the rules and the teacher or assistant must patiently remind them. If the teacher and assistant are patient and consistent, gradually, the rules will become a part of the daily routine and children will begin to remind each other about the rules.

Many management problems may be minimized or eliminated by careful planning, preparation, and guidance. Some of the things that a teacher might remember:

- provide sufficient working space for each center
- conflicts and discussion will inevitably arise when children do not have enough space to work uninterrupted
- establish space limitations for each center
- limit the number of children who may work in each center at one time
- have a storage place or container for everything
- color code materials that go together in one center
- provide sufficient supplies for each center
- arrange furniture so the teacher and/or assistant can observe the total classroom from any point he/she stands
- give a warning before asking children to leave centers
- have a signal for group attention.

As the teacher and children become comfortable and secure within this environment, the teacher or assistant will have more time to act as a facilitator for children's learnings, to observe the children's interest and use of materials, and to interact with individuals and small groups.

UTILIZATION OF ASSISTANT TEACHERS IN CLASSROOM USE OF LEARNING CENTERS

In planning and developing learning centers as an added dimension to the instructional techniques currently practiced by classroom teachers, the presence of the assistant teacher in the classroom should be of consequence. In the past the teacher would have had a difficult time implementing the learning center concept due to the higher pupil teacher ratio and the physical demands of successfully managing the classroom. The assistant teacher, if properly utilized, can not only enable the teacher to more adequately instruct and meet individual student needs, but can allow creative and innovative teaching to replace the overuse of drill and "busy work" which was often employed by frustrated and disillusioned teachers in the past. Briefly outlined are three areas which an assistant teacher could be effectively utilized as the concept of learning centers as an instructional tool is successfully implemented.

Center Development

The development of the instructional materials found in the learning center may be done by the assistant teacher and/or students under the supervision of the assistant teacher. The teacher must provide an objective list relating to the proposed center and provide information to the assistant teacher regarding difficulty level of the activities, the number of activities, the theme of the center, type of activities, materials needed to construct the activities, and the method of evaluation of each activity. An evaluation example would be a set of subtraction problems where the problem is found on one half of an egg shape and the correct answer on another egg half. Only the problem and correct answer will provide a match resulting in a perfect egg shape when the two halves are placed together.

Center/Classroom Management

The assistant teacher can be effectively utilized by the teacher as a moving instructional motivator and reminder of the rules. While the teacher is engaged in small group or individual student instruction, the assistant teacher can provide guidance, clarification, reinforcement, and instruction to students involved in learning center activities. The teacher must involve the assistant when classroom rules regarding the use of learning centers are made. Communication of those rules to students must emphasize the role of the assistant as not to undermine the authority given her/him by the teacher regarding utilization of centers by students. By clearly communicating the objectives of the center and demonstrating how students are to reach them to the assistant teacher, the teacher can then devote energy and time on the introduction of concepts, instructing students who need additional help in understanding concepts, or assisting students reach beyond the basic lesson by introducing enrichment activities confortable in the knowledge that those students involved in center activities are gainfully at work.

Instructional Use of Learning Centers

The assistant teacher can serve as a resource for the student as they undertake work jobs directed by center activities. The teacher must communicate to the assistant teacher specific concepts or skills she/he wishes the student to master as a result of a specific learning center activity to insure desired outcomes take place. The student should be encouraged to independently pursue the specific activities, but the assistant teacher's presence can serve as one to motivate and assist the student in staying on task. Evaluation of student work by the assistant teacher can provide for immediate reinforcement as well as identification of learner problems with a specific concept and subsequent re-teaching.

The assistant teacher and use of learning centers in the classroom instructional repetoire can offer the teacher an expanded scope of teaching techniques which will stimulate, motivate, and excite the teachers as well as the students involved.

SAMPLE LEARNING CENTER PLAN ILLUSTRATING THE INTEGRATED CURRICULUM APPROACH (Math and Language Arts)

The following example indicates the flexibility and opportunity for creativity that the learning center affords teachers as a vehicle for the instruction of students. Should the teacher select a theme such as the popular E.T. character or a more traditional circus motif, various subject area concepts may be integrated into several sub-lessons housed in the central learning center theme. The example listed is taken from the various learning center games and patterns included in the appendices of this module. Activities from each theme area are combined to make a "new" center. This prevents good instructional materials from being misused or ignored by bored students or teachers and/or assistant teachers!

If a background setting is desired for these "new" learning centers three pieces of poster board may be taped together, using wide electrical tape and displayed with one poster board as the center and one on either side. This is an added cosmetic "frill" and not really essential to the learning activities presented.

Name of Theme: ANIMALS

Curriculum Area: Language Arts (Reading) Activity: The Blend Nest (Refer to Appendix B)
Language Arts (Reading/Spelling) Activity: Cowbell Vowels (Refer to Appendix B)
Math (Money) Activity: Howard Hippo (Refer to Appendix C)
Math (Addition) Activity: Feed the Elephant Peanuts (Refer to Appendix D)

While attention has been focused on the use of teacher-made materials for learning center use, many commercially available games and materials lend themselves to utilization by students in the learning center setting. In selecting materials for use in learning centers, the following should be considered:

(1) Do the activities promote independence on the part of the student?
   - Are the directions clear, concise, and easily understood by the student?
   - Can the student read the directions by him/herself (with assistance from picture clues if necessary)?
   - Are the materials self-checking?
   - Do the materials lend themselves to easy clean-up and storage?

(2) Do the activities provide immediate feedback?
   - Are the materials self-checking?
   - Are answer keys provided for self-evaluation by the student?

(3) Are the activities appealing and inviting to the student?
   - Are the materials colorful?
   - Do the theme materials pertain to a current interest of the particular age group (example: Gremlins)?

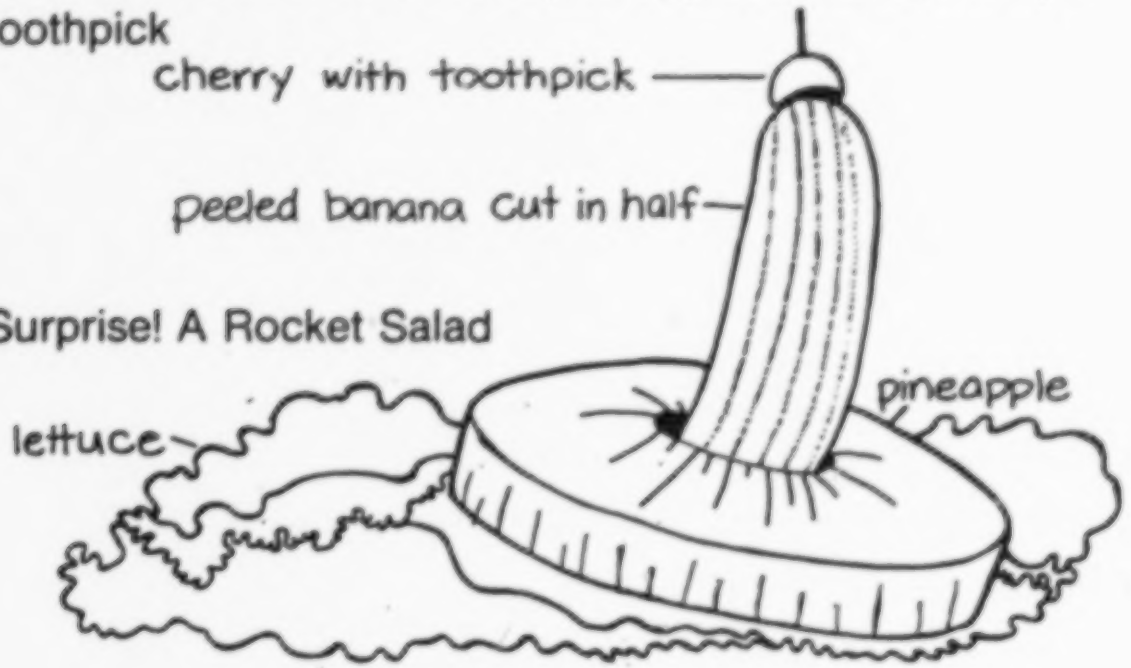
(Leader/Participant Copy)

INTEGRATION OF CHILD DEVELOPMENT PRINCIPLES INTO ONE LEARNING CENTER THEME

Learning Center Theme and Activity	Physical Development	Intellectual Development	Affective Development
Reading **Theme:** Space Travel **Child Selected Activity:** Complete Story Starter Folder on "If I Went To Mars I Would ....."	Hand-eye coordination; Visual Perception developed; Fine motor skills developed	Vocabulary developed; Reason and logic developed; Sequencing of events Process of written communication is developed. Divergent thinking is encouraged.	The child initiates and participates in a learning activity. The child takes responsibility for his learning. The child becomes a manager of his instructional time.
Math **Theme:** Space Travel **Child Selected Activity** "Trip to the Stars" (Teacher-made game similar to any board game.)	Fine motor skills developed; Visual Perception developed	Oral vocabulary developed; Sequencing of events; Development of arithmetical understandings (Addition and Subtraction Number Facts); Using the abstract in the thinking process; Memory skills are developed.	The child cooperates with a peer in playing the game. (The child becomes actively involved in making choices regarding his own instruction.)
Science/Health **Theme:** Space Travel **Child Selected Activity;** **Rocket Salad** (Cooking Activity which may be treated as an individual or small group activity. Recipe on following page.)	Hand-eye Coordination; Fine motor skills developed Good nutritional habits are encouraged.	Sensory experiences with various media; Sequencing of events; Following directions; Exposure to new foods	The child receives primary gratification for task as he is allowed to eat his product. The child is developing an appreciation for proper diet and good health habits. The child develops independence in self-help skills (food preparation).
Science/Art/Language **Theme:** Space Travel **Child Selected Activity:** Construction of the Solar System Mobile	Fine motor skills developed; Visual perception developed	Divergent thinking is encouraged; Integration of modalities occurs; Transfer of knowledge occurs as three dimensional representations are constructed based on information read or pictures observed.	The child develops independence in making choices that promote creativity. The child receives self gratification in completion of the product. The child works as a group member in completing a project for the enrichment of all.

ROCKET SALAD

You will need: lettuce, sliced pineapple, banana, cherry, toothpick



Taken from: Lewis, Gail and Jean Shaw, Recipes for Learning, Exploring the Curriculum Through Cooking. Goodyear Publishing Company, Santa Monica, CA, 1979, p. 40.

DEVELOPING STUDENT RESPONSIBILITY AND INDEPENDENCE THROUGH THE USE OF LEARNING CENTERS IN THE CLASSROOM

The teacher guides the child indirectly when utilizing learning centers in the classroom. The type of equipment selected and the richness of the curriculum or learning experiences provided also affects the likelihood of children doing what is expected of them.[1]

Developing good work habits begins as a young child. When positive work habits are demonstrated, reinforcement by authority figures in the child's life promote the reoccurance of these skills in other work or study situations. The lecture method of instruction is one which reduces the student to a passive participant with little more than the opportunity to answer yes or no as the instruction progresses. Since elementary age children need to be actively involved in the learning process, the short lecture/demonstration instructional technique followed by student activity related to the lecture/demonstration is superior. According to James Hymes, "Bored children will be bad."[2] Learning centers provide the means to involve the student while developing independence and responsiblity, two characteristics necessary for good work and study habits.

Learning centers require the student to take a responsible role in his/her instruction. Activities are provided by the teacher, but the choice of the activity and quality of work exhibited in completing it are decided by the student. Teacher reinforcement of good attempts at completing new activities serves to motivate the student to an even better attempt the next

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(1) Hildebrand, Verna, Introduction To Early Childhood Education, Second Edition, New York: Macmillan Publishing Co., Inc., 1976, p. 94.

(2) Hymes, James, Behavior and Misbehavior, Englewood Cliffs, New Jersey: Prentice-Hall, 1955, p. 57.

time he/she undertakes the task until finally the task has been completed with a high degree of accuracy and excellence. Positive modeling of behavior to reach the final objective can be accomplished with learning center activities by varying the degree of difficulty among activities or gradual modification of those activities until the skill objective has been met by the student. As the child shares in the responsibility of his/her education the process of instruction and school in general becomes more personalized, thus more student committment is present.

When acquiring a portion of responsibility for his/her learning students also develop independence from the teacher and become more self reliant. Learning center activities which are self checking allow students to evaluate their own performance. Those with directions which are clearly and easily stated with pictures or words from reading lists already mastered promote student independence in the acquisition of knowledge. With constant support and encouragement from the teacher and/or assistant teacher children can build a backlog of positive school experiences which, when translated into positive self concept development, may determine the individual's attitude, in some measure, toward school, life, and self.

(Leader Copy)

FOLLOW-UP QUESTIONS

1. How can learning centers work in my classroom?

2. Why should children involve themselves in the instructional process?

3. Will utilization of the assistant teacher encourage the use of learning centers in my classroom? If yes, how; if no, why not?

4. Can the use of materials other than the basal reading or math series be successfully integrated into the daily instructional plan? If yes, how; if no, why not?

USE OF CHECKLIST TO OBSERVE TEACHERS AND ASSISTANT TEACHERS

In using the observational checklist listed in this module supervisors should consider the following:

1) Review the checklist and make any needed revisions to best meet the specific purpose(s) for evaluating teachers and/or assistants.

2) Allow the teachers and assistant teachers to review the checklist before observations begin. Be prepared to answer any questions they may have.

3) Spend at least fifteen (15) minutes observing the teacher or assistant at different periods during the instructional day. (Suggested minimum 4 visits)

4) Conduct a conference with each teacher and assistant teacher upon completion of a series of observations to convey comments, suggestions, and/or positive or negative feedback concerning the observations recorded.

5) Keep all observational checklists on file.

6) Schedule staff development sessions to assist in correcting weaknesses identified in teachers and/or assistant teachers.

7) Re-evaluate teachers and/or assistants following re-teaching staff development sessions to note improvement or correction of weakness areas.

8) Conduct a conference with the teacher and/or assistant teacher following re-evaluation to inform them of progress made.

OBSERVATIONAL CHECKLIST FOR UTILIZATION OF LEARNING CENTERS
IN THE CLASSROOM

Teacher Name _____ Asst. Teacher Name _____

Evaluator Name _____

Circle the appropriate response to questions below.

Date _____

1.	Does teacher planning reflect utilization of learning centers?	yes no n/a
2.	Are learning center(s) utilized in the classroom?	yes no
	(a) If yes, are they: daily weekly monthly	(circle one)
	(b) If no, an administrative decision must be made as to requiring the use of learning centers or allowing it to be optional.	
3.	If centers are utilized, do the activities reflect individual needs of the students?	yes no
4.	Is the assistant teacher utilized in the development of the learning center?	yes no n/a
5.	Is the assistant teacher utilized in the management of the learning center?	yes no n/a
6.	Is the assistant teacher utilized in the instructional use of the learning center?	yes no n/a
7.	Are classroom management procedures evident as students utilize the learning center(s)?	yes no n/a

If answers to questions 3-7 are NO state observations made:

_____

_____

_____

If answers to questions 3-7 are YES state observations made:

_____

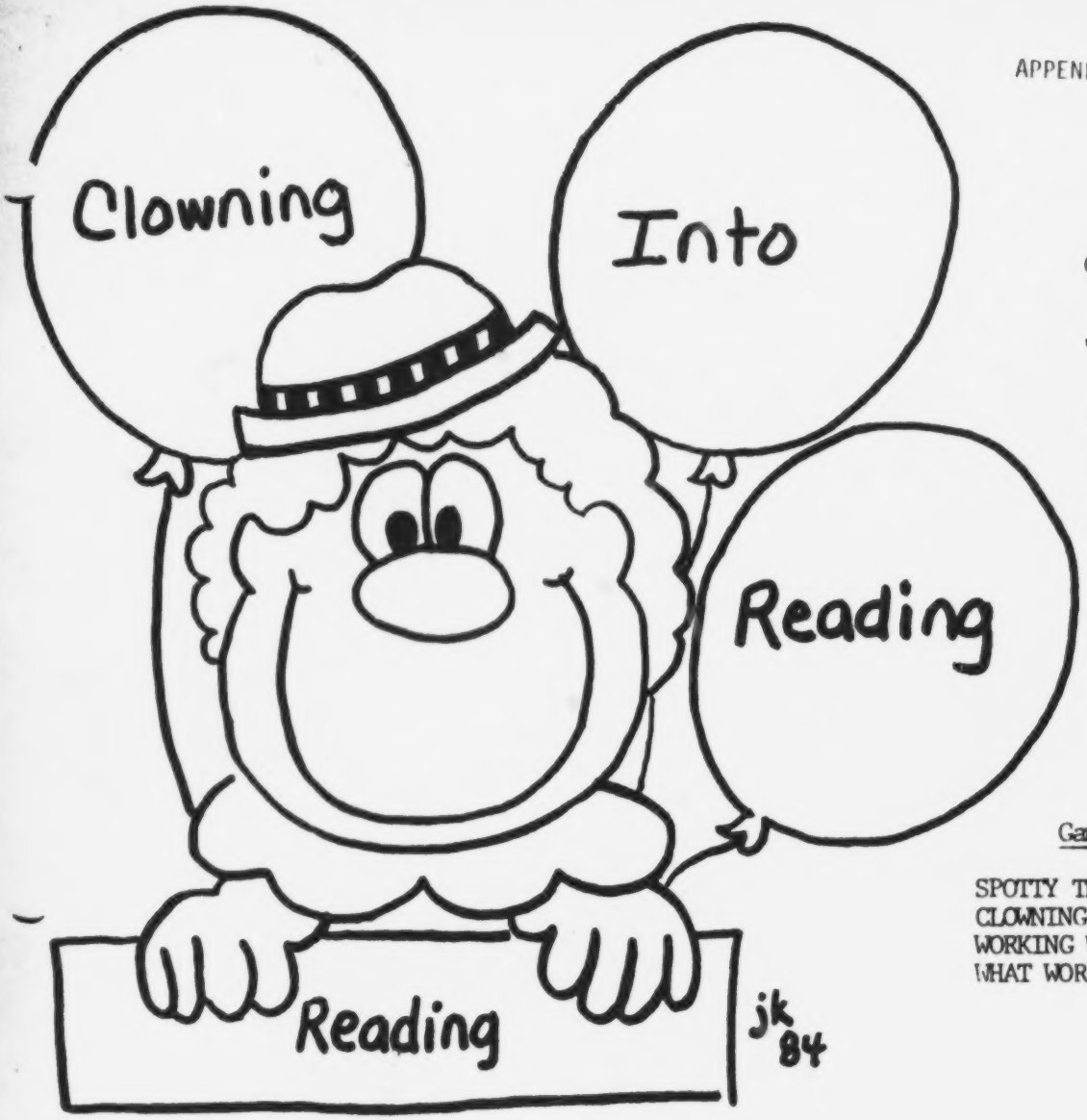
_____

_____

_____ _____

Date Signature of Supervisor

(For further checklists on this topic refer to the blue manual for staff development of assistant teaches (Segments 4-6) compiled in 1983-84 for more information.)



CLOWNING
INTO
"READING"

(A Second Grade level learning center dealing with different reading activities.)

Games Included

SPOTTY THE CLOWN
CLOWNING WITH VOWELS
WORKING WITH THE CLOWNS
WHAT WORDS CAN YOU MAKE?

SPOTTY THE CLOWN

Objective: The student will be able to correctly identify the vowel sound of a given word as long or short.

How to Make: Using pattern given, make two large clown figures from poster board. Add features using colored contact paper, wall paper, or toher fadeless colored paper. The more colorful the game the better. Be sure to make the clown's suits a solid color. On one of the clown's shoes print the words "LONG VOWELS" and on the other clown's shoes, print the words, "SHORT VOWELS". Cut out approximately twelve spots for each of the clowns. On twelve of the spots, print words that have the long vowel sounds, and on the other twelve print words with short vowel sounds. Cover clowns and spots with clear contact. To make self correcting for the child,

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Spotty the Clown continued....

label each spot as long or short on the back side.

Examples of Words:

Short Vowel Sounds:			Long Vowel Sounds:		
dog	duck	pup	road	read	coat
desk	milk	win	kite	week	nose
cat	nest	fox	cake	seat	rain
apple	bed	ten	suit	snake	use

Directions for the Students:

Look at the words on each of the spots. Read the words aloud. Decide what vowel sound you hear in the word. If it is a short vowel sound place the spot on the short vowel clown and if it makes the long vowel sound, place the spots on the long vowel clown. To secure the spots use small pieces of masking tape rolled so that they are sticky on all sides and easily removed for storage or when learning center is not in use.

VOWEL RULES:

When a word has only one vowel, the vowel sound will usually be short. Examples: cat, nest, dog

When a word has two vowels, the first vowel usually makes its long sound and the second vowel is usually silent. Examples: meat, rain

If a word ends in e, the first vowel usually makes its long sound and the e is silent. Examples: make, rode, tease

*****

CLOWNING WITH VOWELS (Folder game)

Objective: The student will be able to correctly identify the vowel sound in a given word as either long or short.

How to Make: On the inside of a colored folder place two clown faces, one on each of the sides of the folder. Make their features as colorful as possible. On one side of the folder attach a balloon that reads "Long" and on the other side attach a balloon that reads "Short". Cover inside of the folder with clear contact paper. Decorate front of the folder with balloons that read, "Clowning With Vowels". Attach a manilla envelope which has been covered with patterned contact paper for storage of the game pieces. Cut out several balloon shapes from colored paper and attach a yarn string to each. On each balloon print a word that has either long vowel sounds or short vowel sounds. Make self correcting by printing long or short on the back of each balloon. Store in envelope.

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Clowning with Words continued....

Example of words:

Short Vowel Sounds

jump	fox	leg	ax
pot	well	rock	
man	bed	milk	

(See rules in the game above, "Spotty the Clown".)

Long Vowel Sounds

coat	wake	bite	neat
mule	like	cane	
cute	boat	feet	

Students Directions:

Read the words on each of the balloons. Decide if the word has a long vowel sound or a short vowel sound. Place the balloon with the correct clown. Check your answers on the back of the balloon.

****

WHAT WORDS CAN YOU MAKE.....IN THE CLOWN'S EAR????????

Objective: The student will be able to construct word families by correctly sounding out initial consonants and joining them together with root words.

Cut out a clown's head using the pattern given, add features. Make as colorful as possible. On the right ear of the clown, place the letters ear. Cut a slot approximately two inches apart and one inch long so that you can pull a strip through it. On a strip of poster board about one inch by twelve inches, place a variety of consonants on the strip to make new words as the strip is pulled through the slot in the clown's ear.

Directions to the Student

Pull the strip until a letter appears in the slot and read orally the new word made by changing the initial consonant or consonants.

Example of consonants and new words

ear

d h f n t y sp

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Working with the Clown

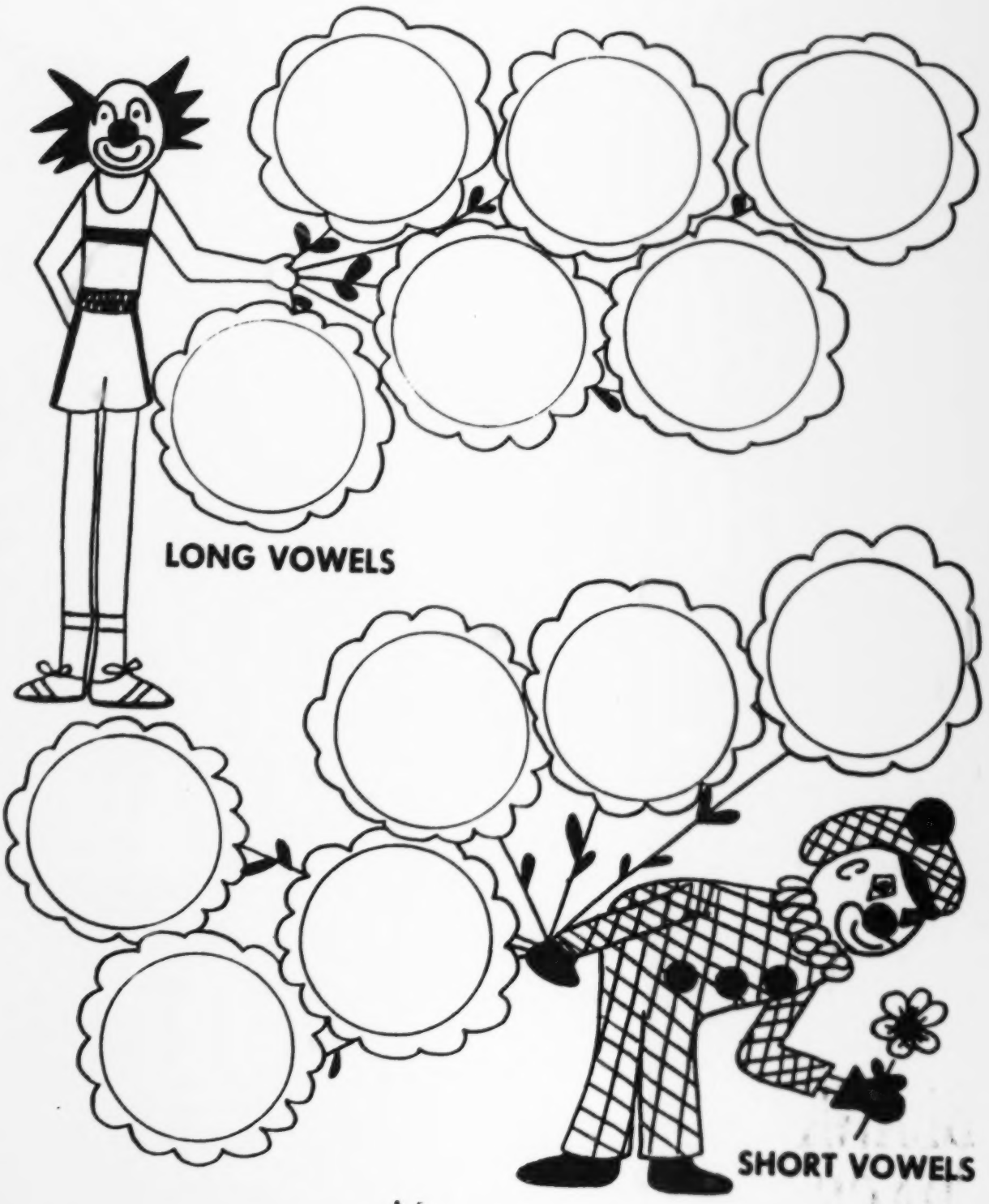
Cover a box with patterned contact that is large enough to hold 8 1/2 x 11 inch papers. Place a variety of worksheets for the students to work on at their own pace. Change the work sheets as you cover different areas of reading. Make a colorful clown face and attach to the back of the box, so that the children can associate the clown with their worksheets. Examples of worksheets are found on the next page.

A BOUQUET OF FLOWERS

Look at the words on the side of the page. Print all the words that have a short vowel sound on the flowers in the hand of the short clown. Print all the words that have a long vowel sound on the flowers in the hand of the long clown.

WORDS

lip
kite
time
sit
rib
slide
dime
slide
tin
five
pine
kit



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A BUNCH OF BALLOONS

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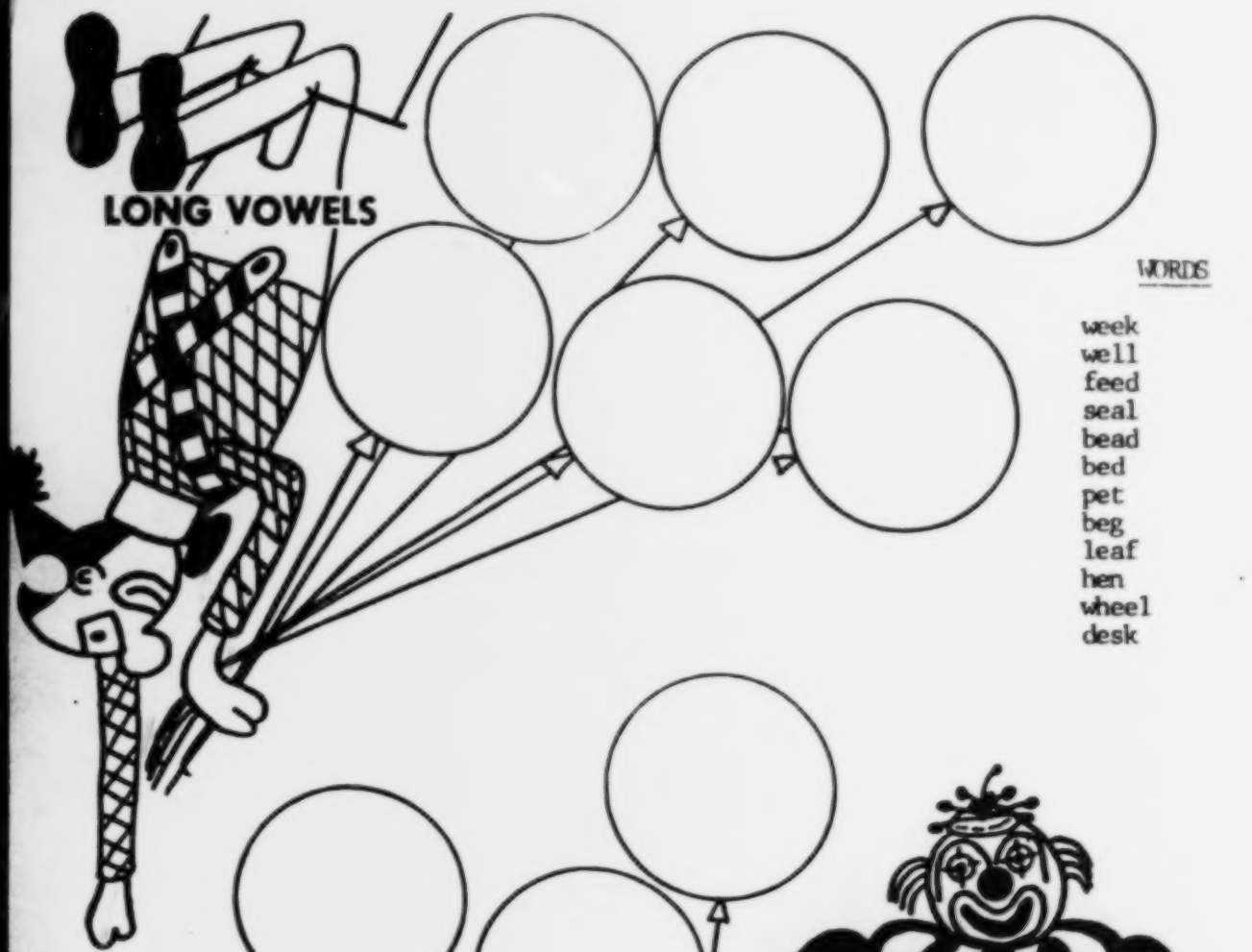
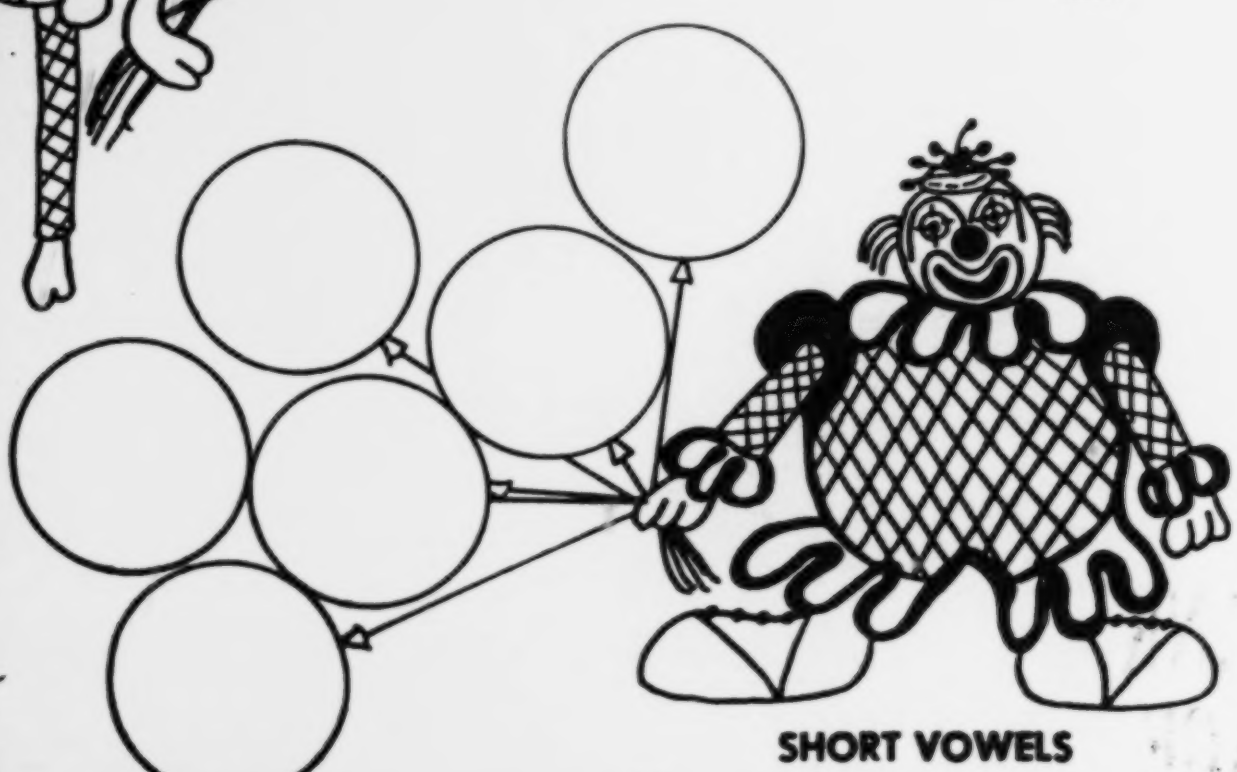
Look at the words on the list at the side of the page. Print all the words that have a short vowel sound on the short clown and all the words that have a long sound on the long clown's balloons.



WORDS

week
well
feed
seal
bead
bed
pet
beg
leaf
hen
wheel
desk



CLOWN CARTS

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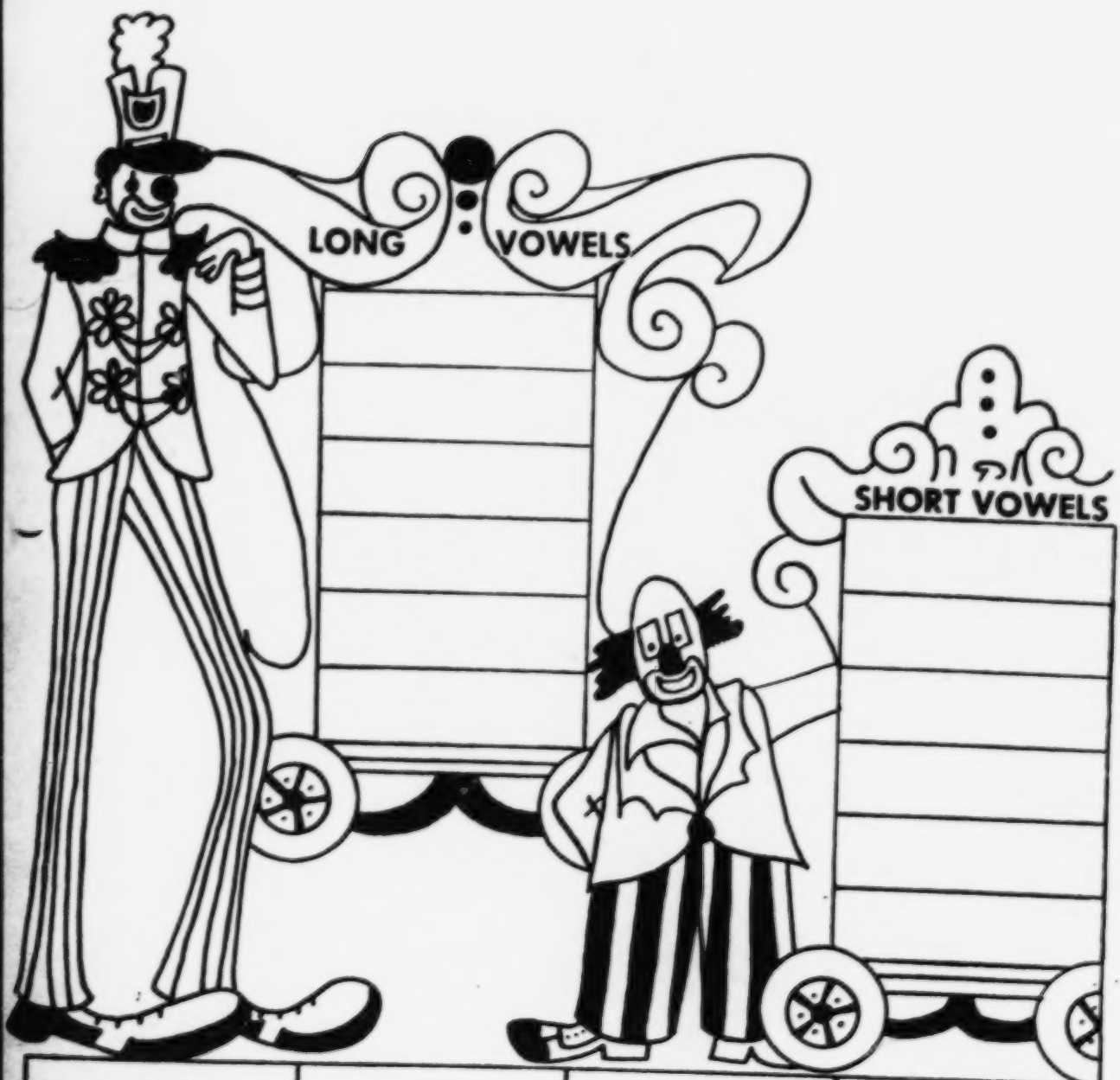
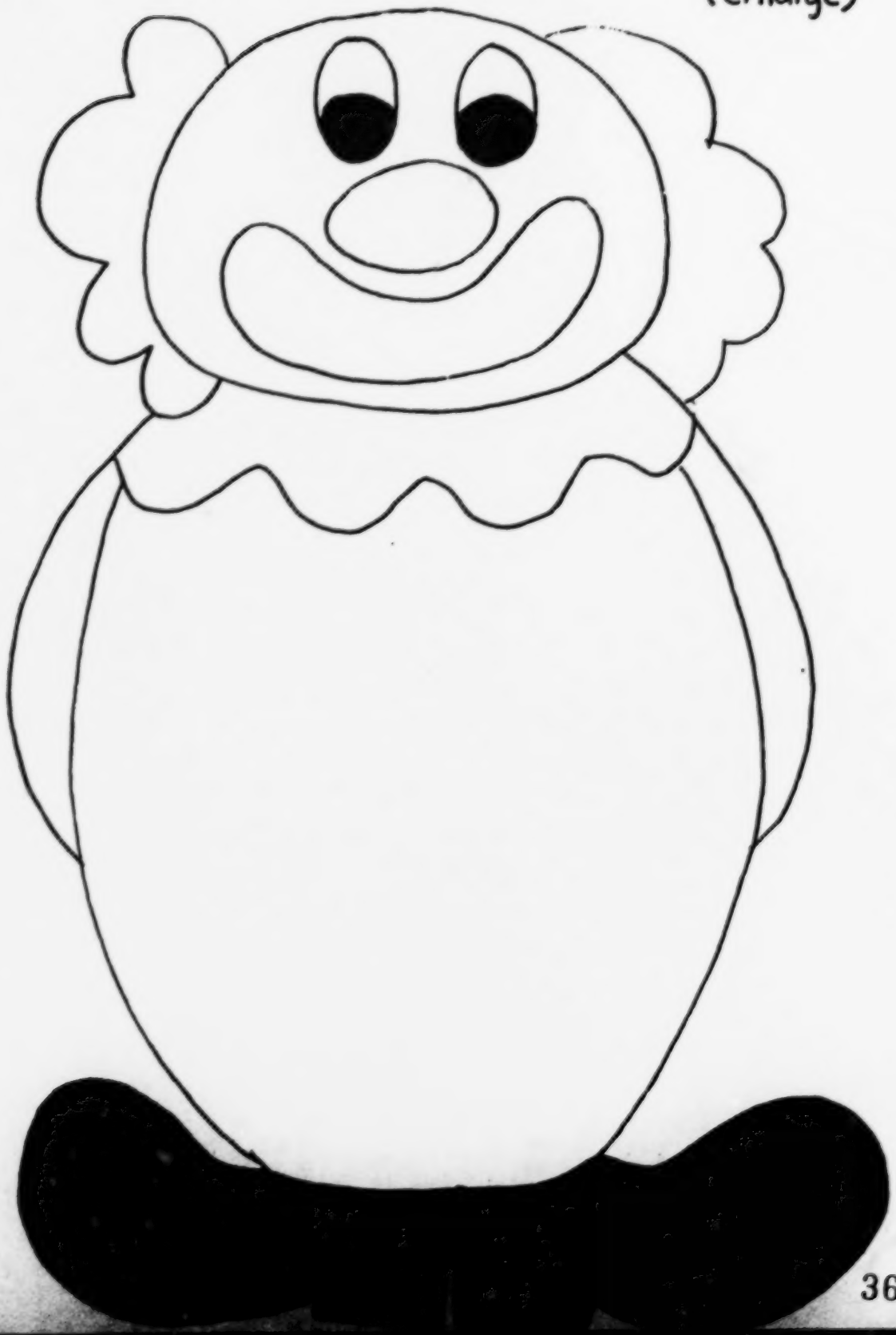
Look at the words at the bottom of the page. Print the short vowel words with the clown that is short. Print the long vowel words on the cart of the long clown.



pan	safe	save	mad
bag	late	sat	same
made	hat	wave	ham

"Spotting the Clown"
(enlarge)



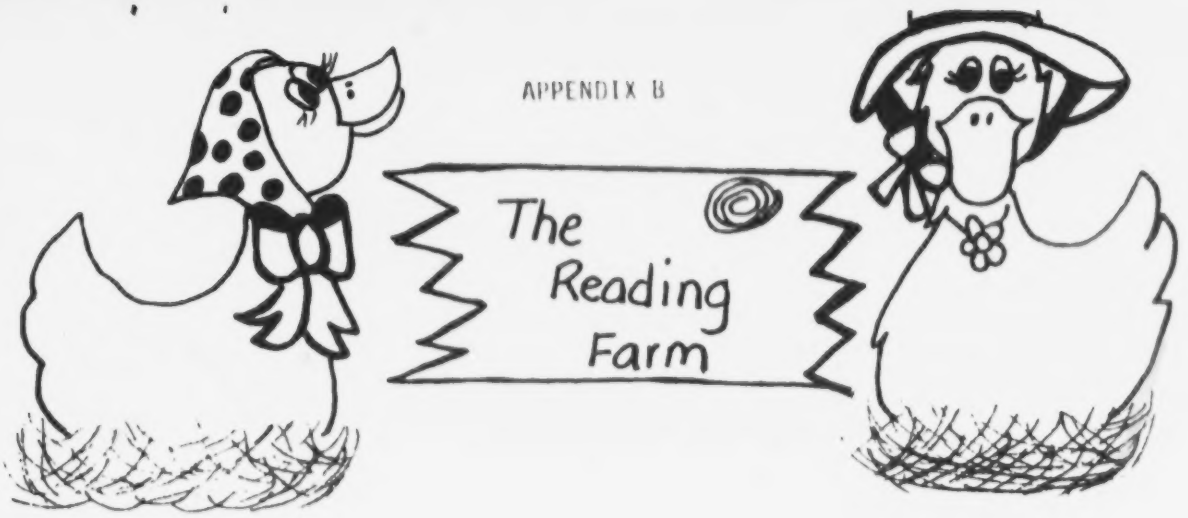
"Clowning With Vowels"
Actual Size

Clown Sheets

Actual Size

What Words Can You Make..... In My Ear?

A-12



Games Included

THE BLEND NEST	COMPOUND HEN
ALPHABET DOG	COWBELL VOWELS
PORKYS	TILLY TURTLE

THE BLEND NEST (Consonant Diagraphs WH and CH)

Objective: The student will be able to correctly match the incomplete word with the correct beginning diagraph.

How to make: Cut out two hens using the pattern provided. Add features and on one of the hens, print the letters CH and on the other hen print the letter WH. Attach a craft stick to back of the hens so they look like stick puppets. Cover a flat box with contact paper or paint it to look like a hen's nest. Make several slots in the top of the box about one half inch long. Now cut out eggs using pattern given and on each egg place an incomplete word to complete the wh and ch. (Examples are given) Attach a craft stick to each egg so that it will fit into a slot in the nest. Cover eggs and hens with clear contact paper for protection.

Student Directions: Place the two hens at the back of the blend nest in the slots on the nest. One hen will read CH and the other hen will read WH. Look at the incomplete word on each of the eggs and insert the egg into the slots in front of the CH hen if the CH plus the incomplete word makes a word and place the eggs into the slots in front of the WH hen if the WH plus the incomplete word makes a word.

Examples:

CH		WH	
alk	air	at	ale
at	in	eel	y
ick		eat	ite

ALPHABET DOG
(Alphabetical Order)

Objective: The student will be able to correctly put words in alphabetical order according to the first letter of each word.

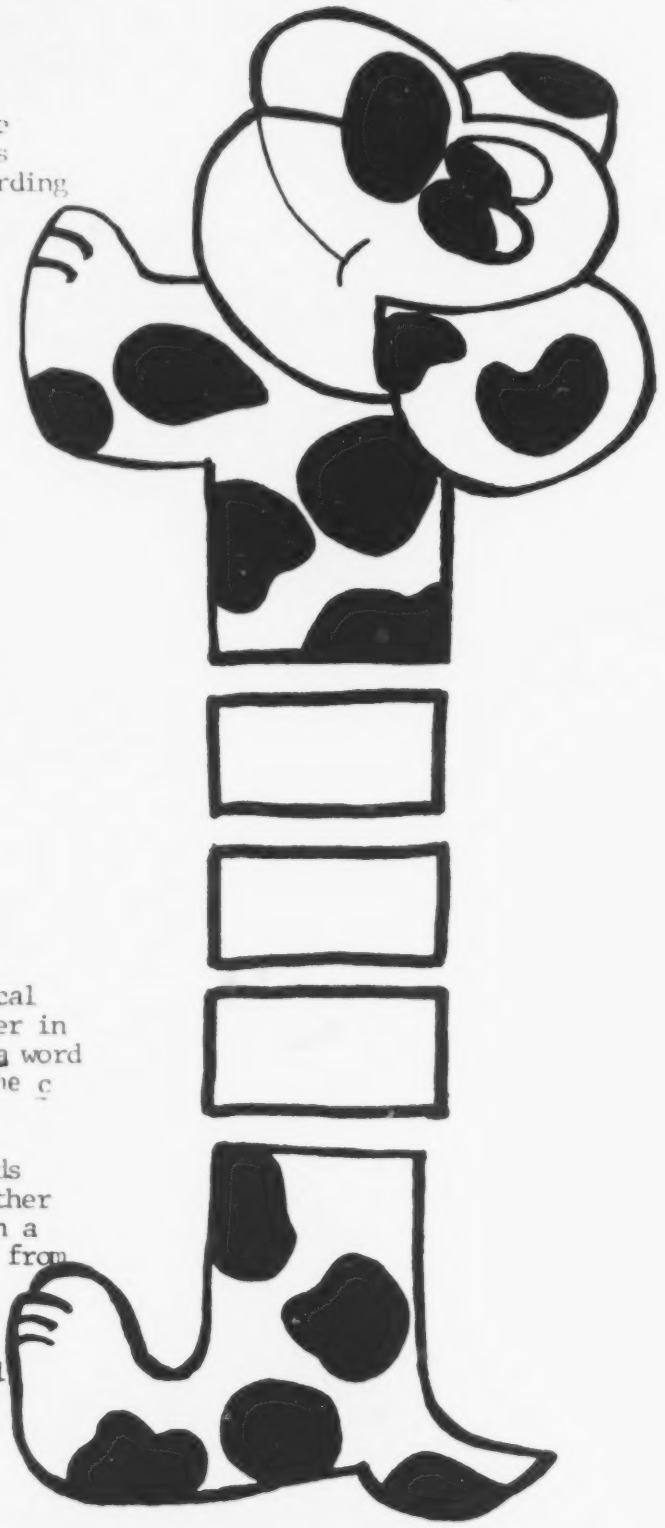
How to Make: Using the pattern given, cut out a dog body. Add features and cover with clear contact paper. Cut out twenty-six letter cards and on each card print a word, a list of words is given. Cover cards with clear contact paper.

ate	hat	off	van
bee	if	pot	was
can	jug	quit	x-ray
dog	king	rag	yes
egg	leg	sat	zoo
frog	men	tug	
gun	nap	us	

Student Directions:

Make the dog's body longer by putting the words in alphabetical order. Look at the first letter in each of the words. Place the a word first, then the b word, then the c word, etc.

After you have put all the words in alphabetical order, try another game, Put all the word cards in a pile and choose ten word cards from the pile. Put these ten words in alphabetical order. Mix the words up and try again. Write the words in alphabetical order on a sheet of paper.



COWBELL VOWELS
(Long and short vowels)

Objective: The student will be able to correctly identify the vowel sound in a word as long or short.

How to make: On the inside of a colored folder place two cows one on each side of the folder. Add features and cover with clear contact paper. Pattern is given for cow. On one cow print long vowels and on the other print short vowels. Cut out several cowbell shapes and on each cowbell print a word that has the long or short vowel sound a list of words is given. Cover the bells with clear contact paper. Decorate the front of the folder and label "Cowbell Vowels". Attach a manilla envelope covered with patterned contact for durability on the back of the folder.

Examples of words:

Short		Long	
hid	may	read	side
can	bed	coat	rope
cup	bus	use	rain

Directions to the Student:

Look at the words on each of the cowbells. Read the word orally. Decide if it makes a long sound or a short vowel sound. Place all the short vowel words on the cow on the side of the folder that reads short vowels and place all the cowbells with the words that are long vowel sound words on the side of the folder where the cow that reads long vowel is placed.

******

TILLIE TURTLE (Prefix re)

Objective: The student will be able to add a prefix to a root word and sound out a new word.

How to make: Using the pattern given, make a turtle and cover with clear contact paper. Place the prefix re on the turtle. Add several spots to the turtle's shell. Cut out additional spots and on each spot print a word (see list given). Cover spots with clear contact paper.

Student's Directions: Cover the spots on the turtle's shell with the spots that have words on them to make new words, read the words orally.

Examples: form, paint, write, do, build, fill, load, form

COMPOUND HEN
(Compound words)

Objective: The student will be able to make several compound words using the word "some" as part of the word.

How to Make: Using the pattern given, make a hen, add features and label with the word "some". Make an egg and on the egg place colored shapes. Cover the egg with clear contact paper. Cut out matching shapes from colored poster board and on these shapes print a word that can be combined with "some" to make a new word. Examples are: time, where, thing, what, one, body, way. Cover these shapes with clear contact paper.

Student's Directions: Read the words on the shapes. Place these words on the egg to make new words. Read the words orally, Write the words on a sheet of paper.

Vary the activity by using different words such as book. Words may be case, keeper, mark, store, worm, etc.

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PORKYS

(Long and short vowels oo)

Objective: The student will be able to differentiate the long oo words from the short oo words.

How to Make: Using the pattern given, make two pigs from white poster board. Add features and black spots. On one pig label long oo and on the other pig, label short oo. Make a duplicate set of spots for each pig and on these spots place words with long oo and short oo.

Examples of words:

long oo	short oo
boot	foot
tooth	hood
roost	look
boom	shook
too	book

Student Directions: Read the words on each spot. Decide if the word has the long oo or short oo sound. Match the spots with the correct pig.

"Compound Hen"

Actual Size

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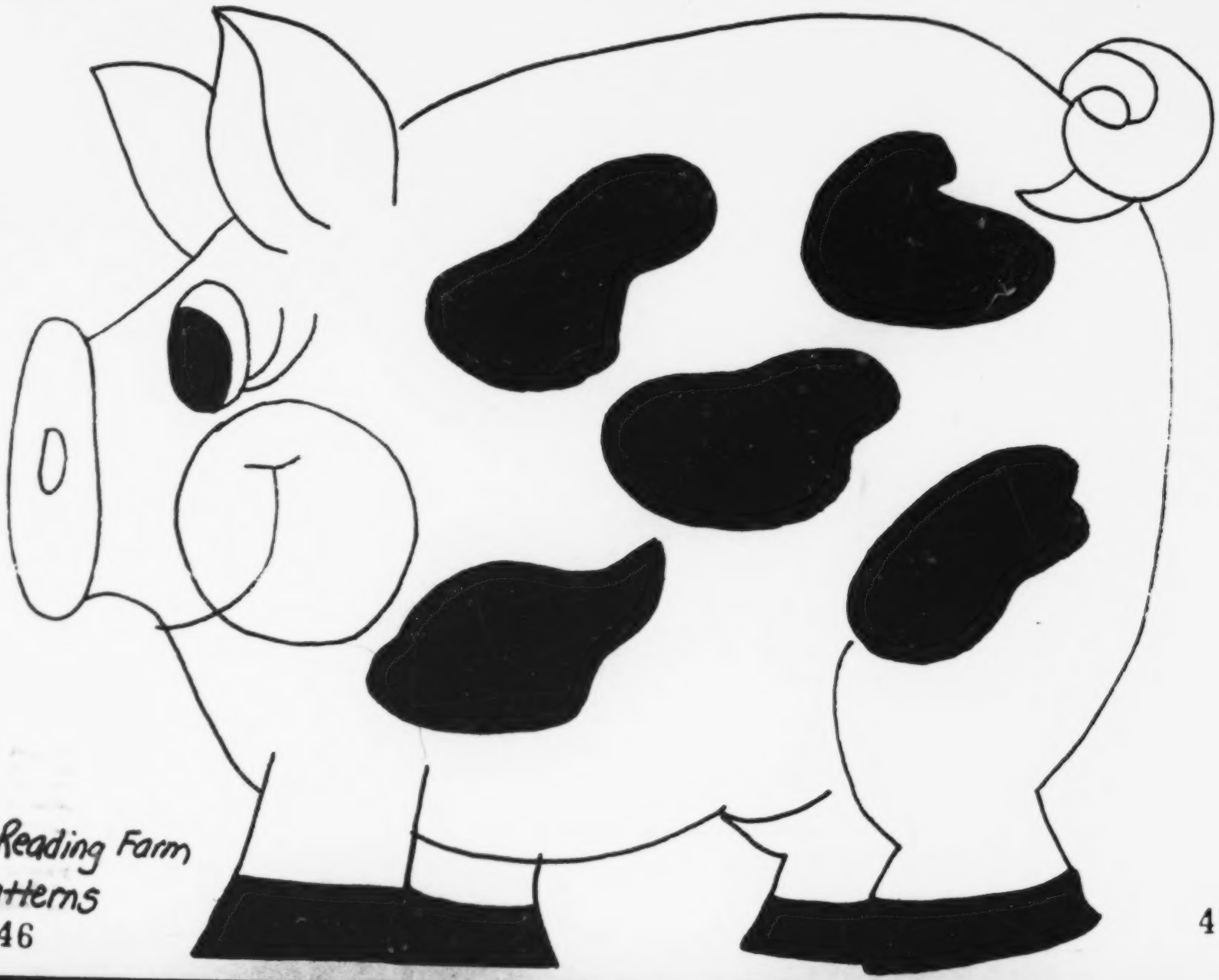
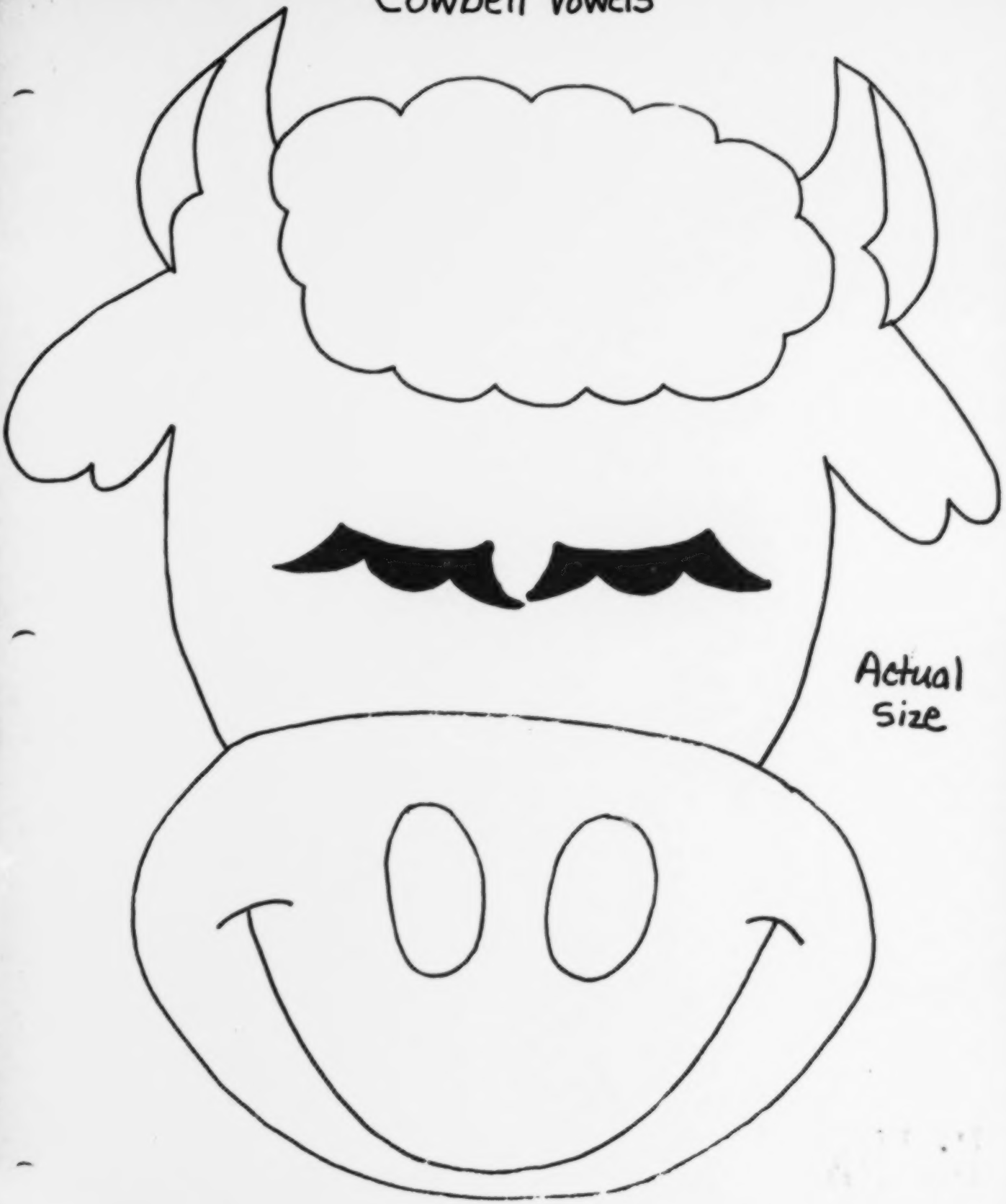
Porkys (enlarge)



Cowbell Vowels



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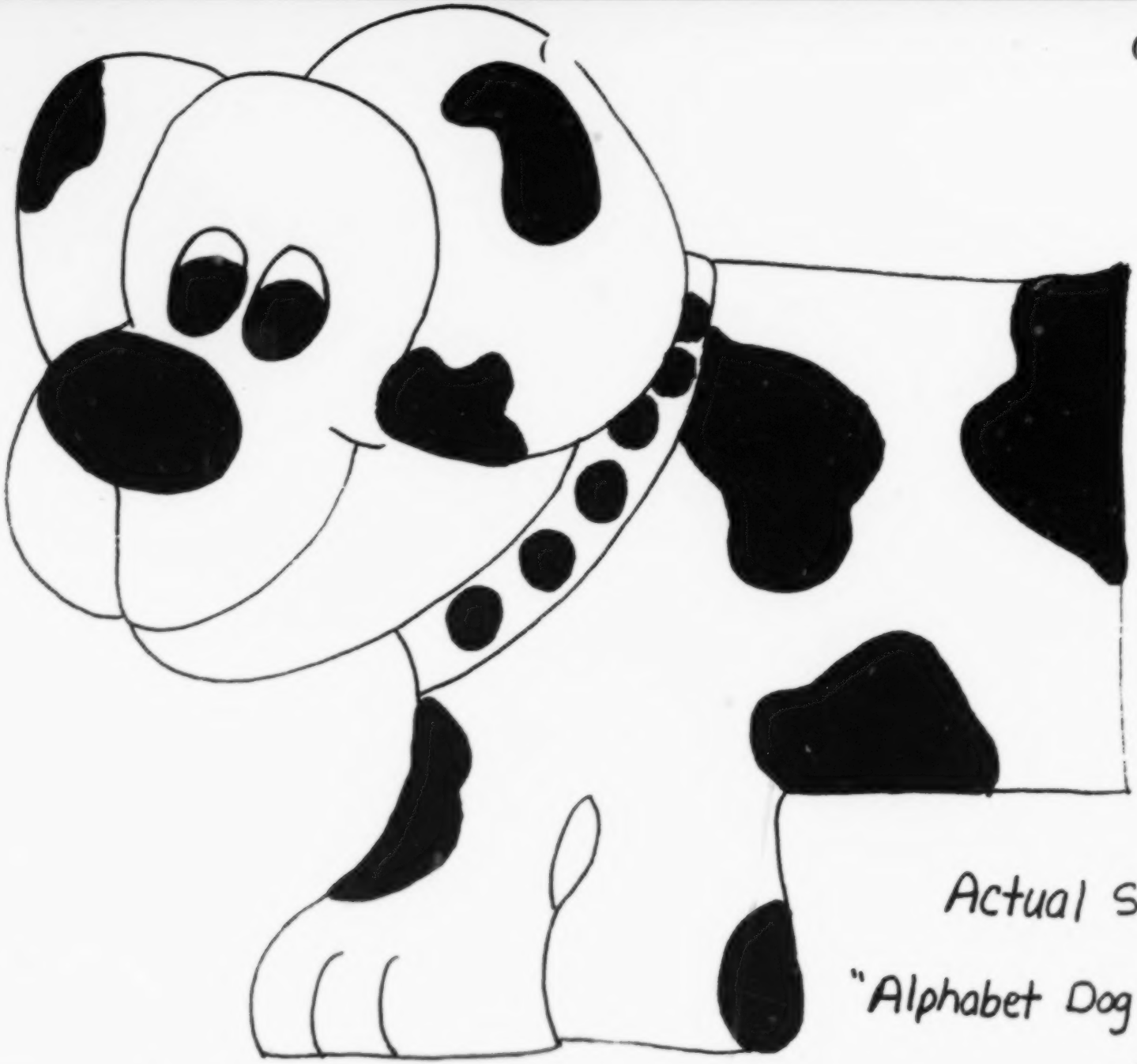
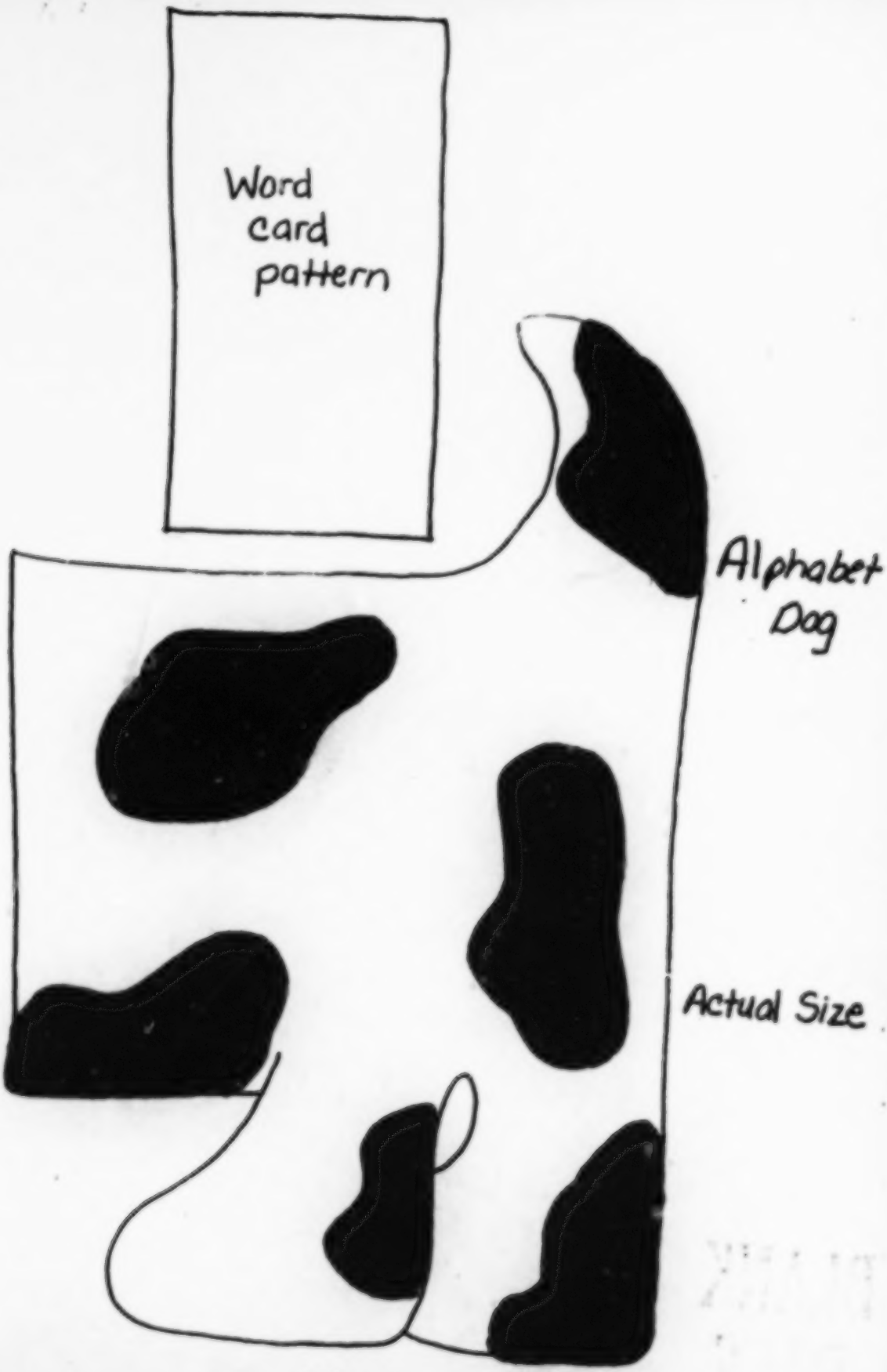


Actual Size

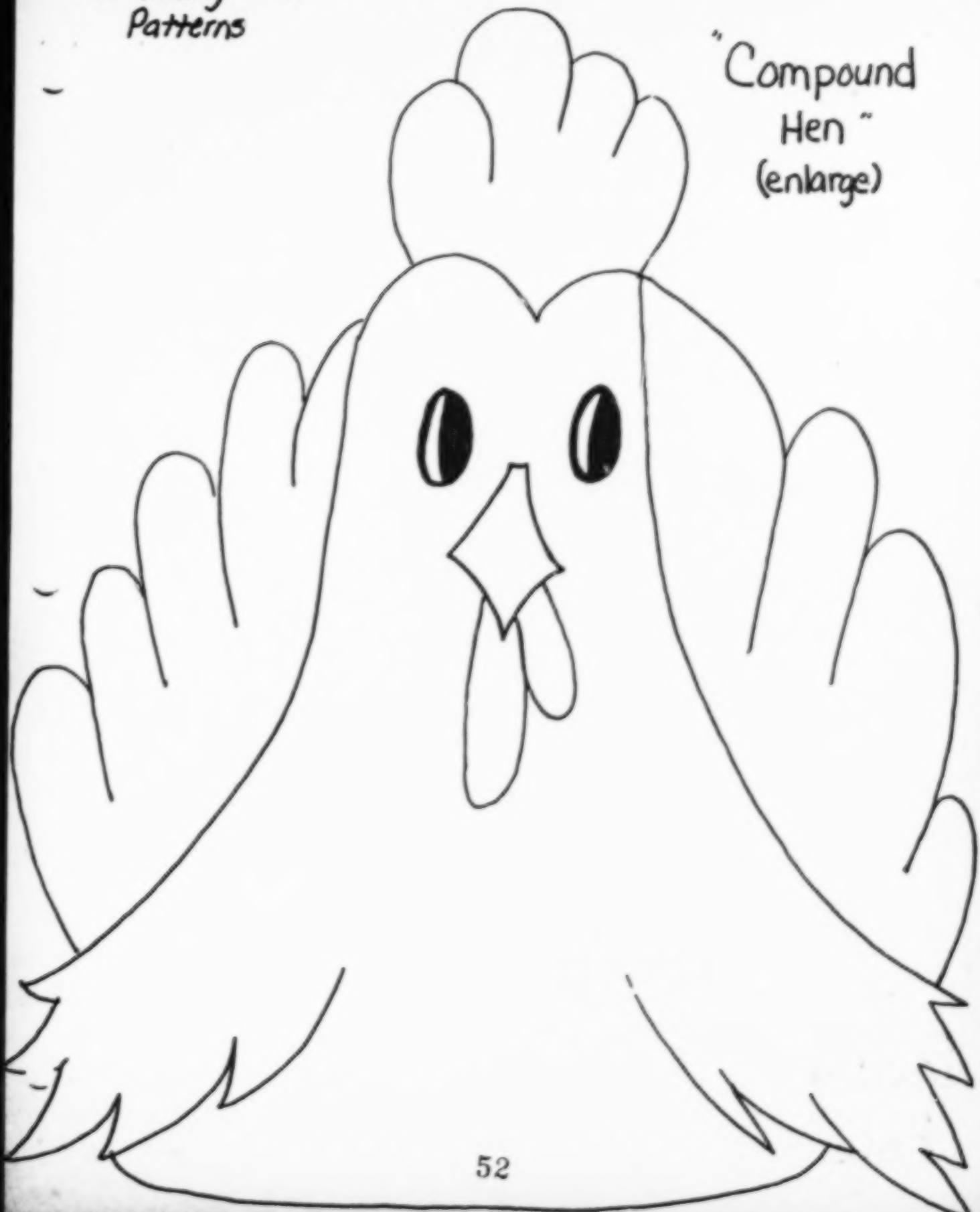
"Alphabet Dog"

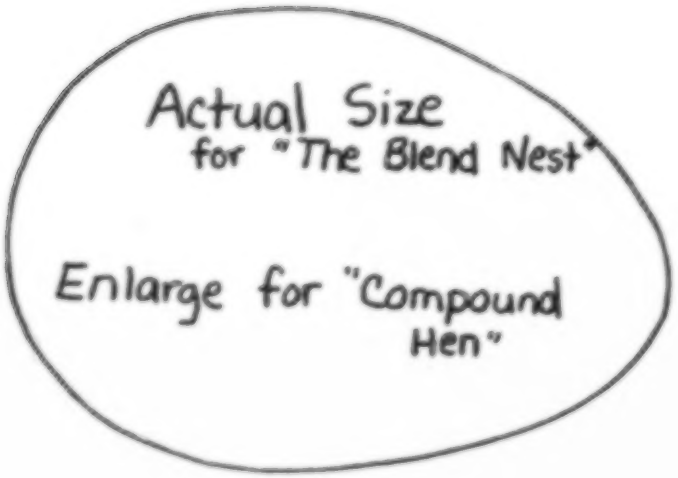
6-9

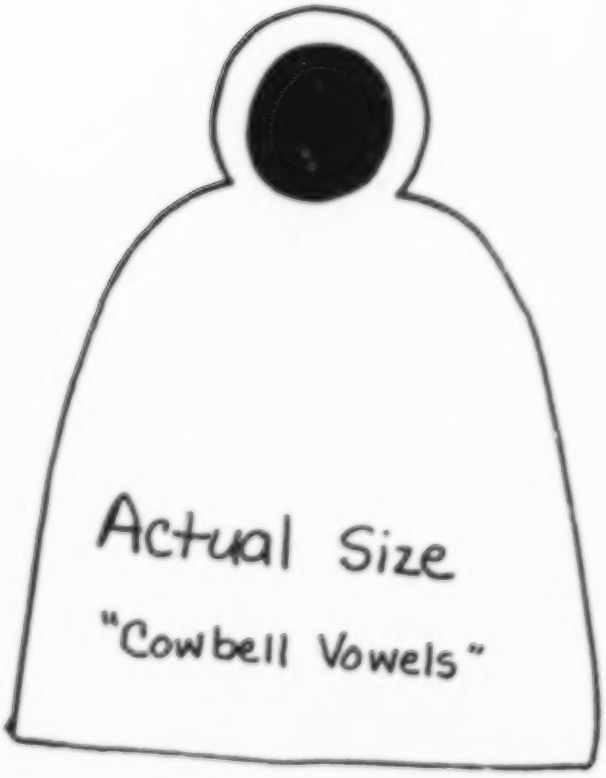


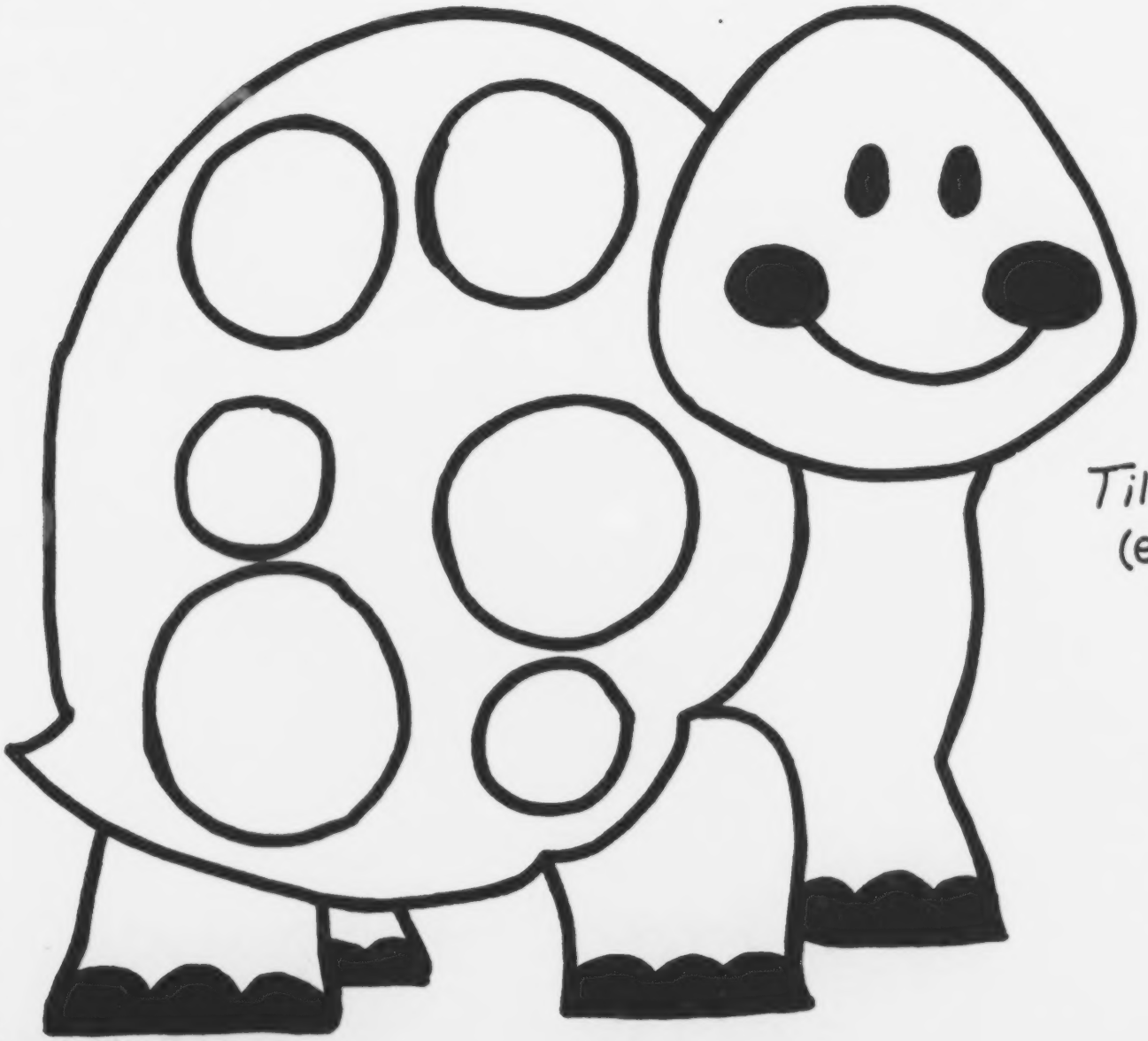
The Reading Farm pattern

"Compound Hen"
(enlarge)



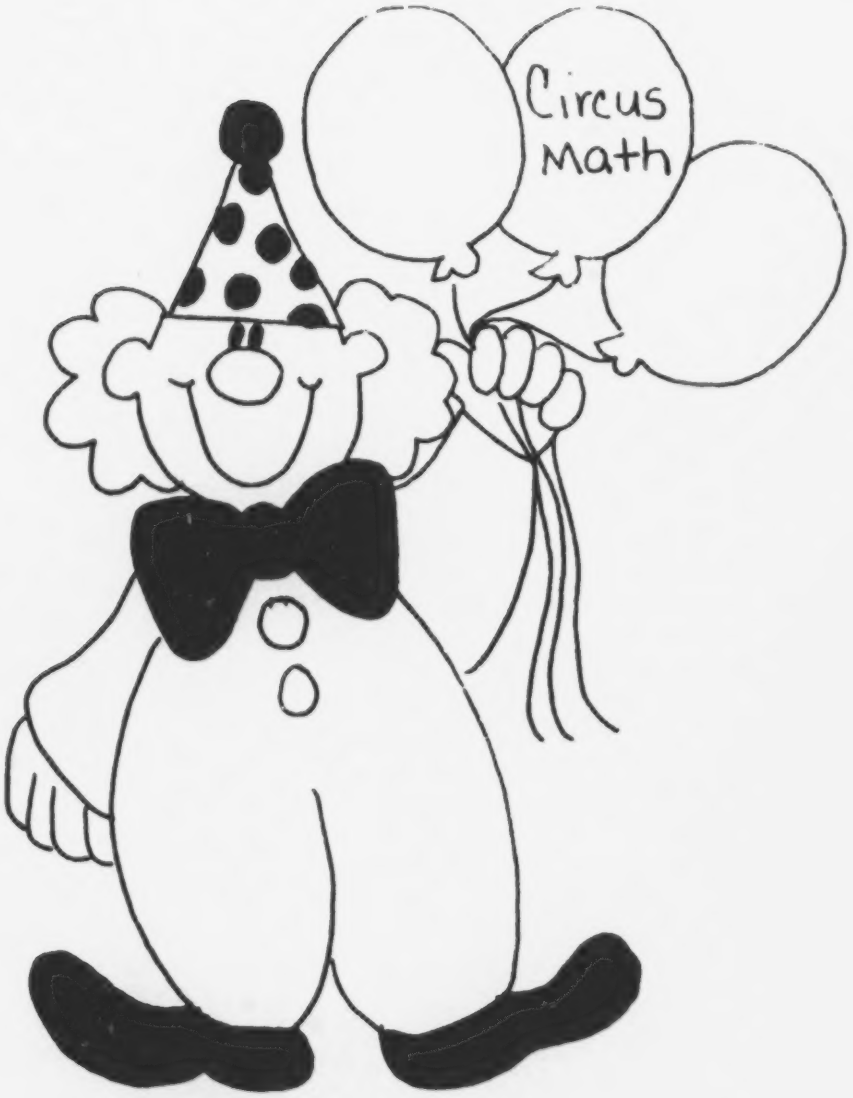

Actual Size
for "The Blend Nest"
Enlarge for "Compound
Hen"


Actual Size
"Cowbell Vowels"



Tilly Turtle
(enlarge)

B-13



Activities Included

LION TIME
TONY THE TIGER
FEED THE ELEPHANT PEANUTS
CIRCUS SEAL

LION TIME
(Telling time)

Objective: The student will be able to correctly move the hour and minute hands of a clock face to illustrate the time as written on a time card.

How to Make: Using the pattern given, make a lion's head, add features. Be sure to cut out the mouth so a child's hand can reach in. Cover the lion with clear contact paper. Attach the lion to a small box so it will stand up and can hold time cards. Cut out the mouth shape into the box. Make several time cards with different time intervals on each. Make a clock with movable hands for the child to use.

Student's Directions: Reach into the lion's mouth and pull out a card. Correctly show that particular time on the clock provided.

TONY THE TIGER
(Subtraction)

Objective: The students will be able to find the correct answers to given subtraction problems.

How to make: Using the pattern given, make twelve tigers and twelve seats for them. Add features to the tigers . Cut out twelve seats using the pattern given and on each seat place a subtraction problem. Cover seats with clear contact paper. Now place the answers to each problem on the tigers. Cover tigers with clear contact paper.

Student's Directions: Look at the problem on the seats. Solve the problem and place the tiger with the correct answer on the matching seat.

This activity may be varied to include other number facts, addition problem, etc. Simply change the facts printed on seats and tigers.

FEED THE ELEPHANT

(Addition)

Objective: The student will be able to correctly solve given addition problems.

How to make: Using the pattern given, make an elephant. Add features and cut out it's mouth. Cover with clear contact paper. Attach to a gallon milk jug with the top cut out. Make several peanut shaped cards and place an addition problem on each card. Cover cards with clear contact.

Student's Directions: Look at the addition problem on each card and solve it by counting the number of peanuts and feeding to the elephant.

*****

CIRCUS SEAL

Objective: The students will be able to correctly complete the worksheets provided by the teacher.

How to make: Cut out a seal and add features. Cover with clear contact paper. Cover a box with patterned contact paper and attach seal to the back of the box.
Have a variety of worksheets available for the children to complete and place them in the box.

Student's Directions: Take a worksheet out of the box and complete it. Now change to another worksheet.

Samples of worksheets are included and were copied from CIRCUS DAYS MATH ACTIVT by Sue Parker, copyright 1976 by Creativ Teaching Press, Inc., Monterey Park, California 91754

C-3

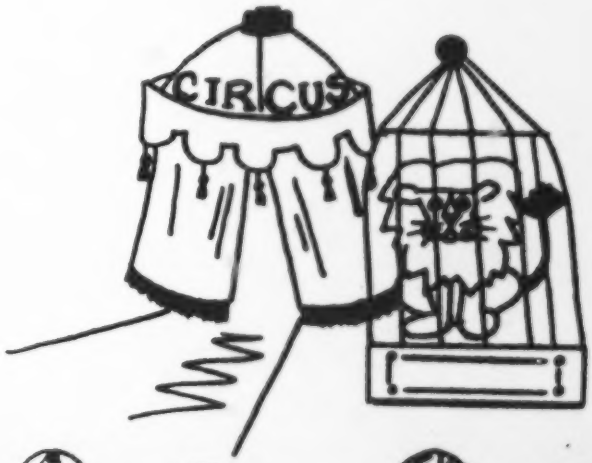
Let's Get the Show on the Road!

Can you help them read the time?

On the back draw your own clock. Show what time it is now.

Let's Go to the Circus

These children need your help. How much money does each child have?



Add the Balloons

ADD the numbers in the balloons.

Coloring Code: Color the balloons these colors: 4-blue, 5-red, 6-green, 7-yellow, 8-purple, 9-brown, 10-orange.

Circus Seal
(enlarge)

Lion time
(enlarge)

C-9

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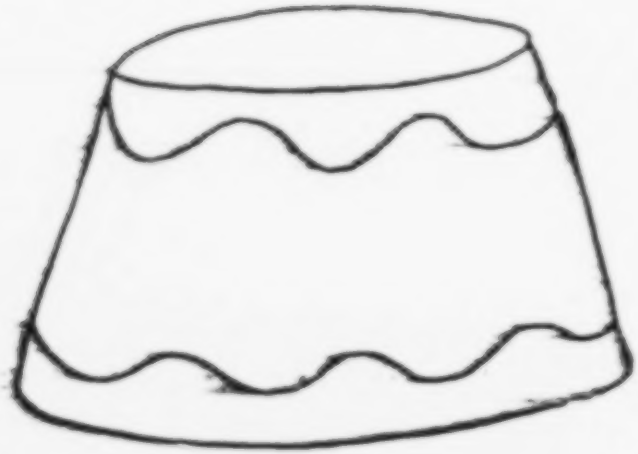
"Tony The Tiger"

Actual Size



C-10

Circus Math Pattern

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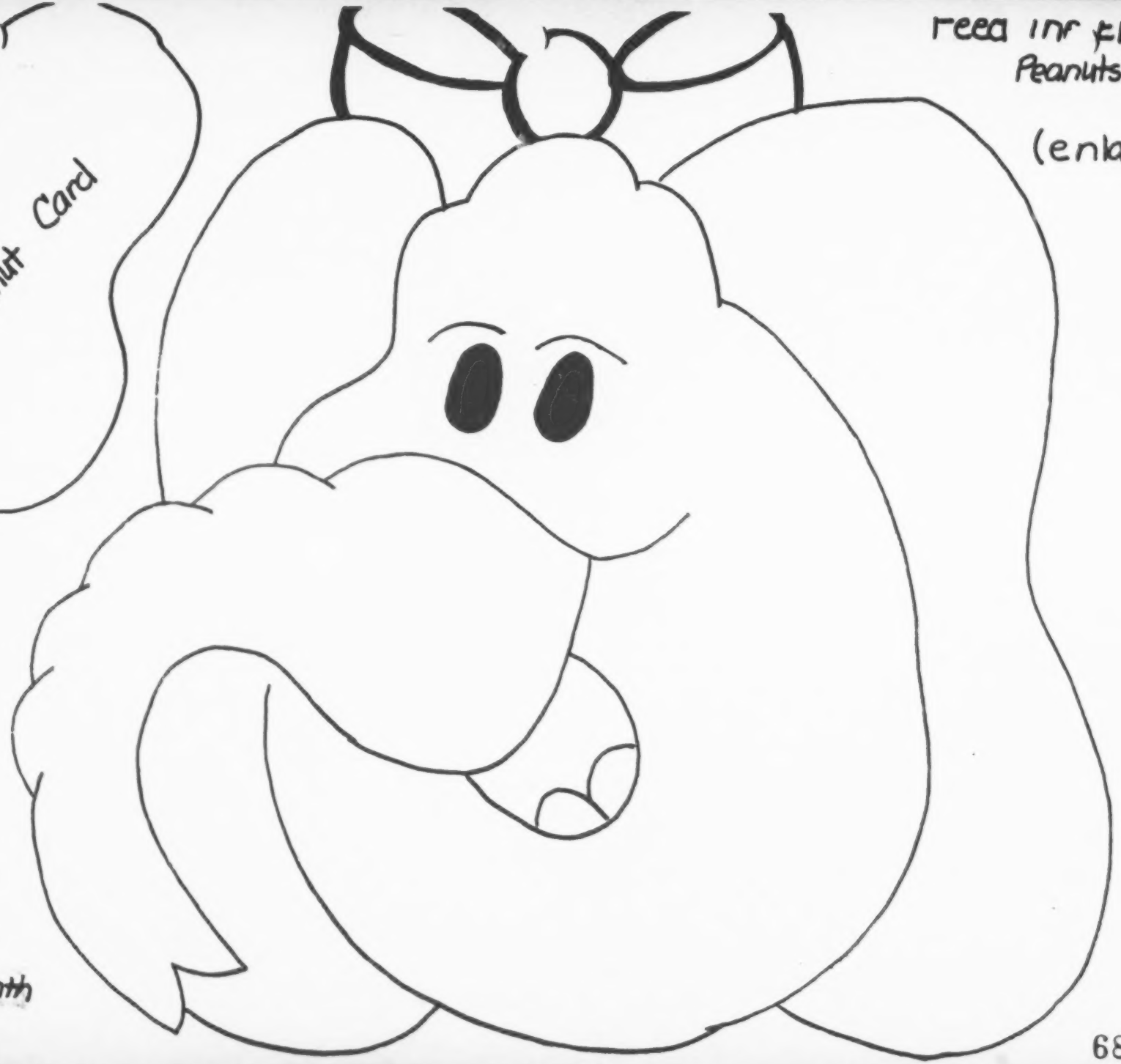
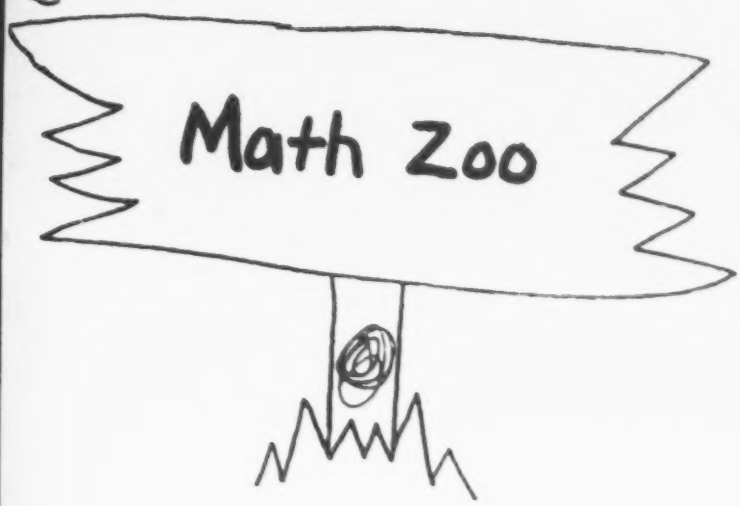
Peanut Card

C-11

Area for Elephant "Peanuts"

(enlarge)





ACTIVITIES INCLUDED:

Howard Hippo
Monkey Business
Absent -Minded Elephant
Kangaroo Time
Leo Lion

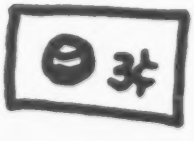
Math Zoo is a learning center designed for use with second grade students, Vary the activities as needed or as subject matter changes. An addition activity can be changed to substraction or a time one to money, etc.

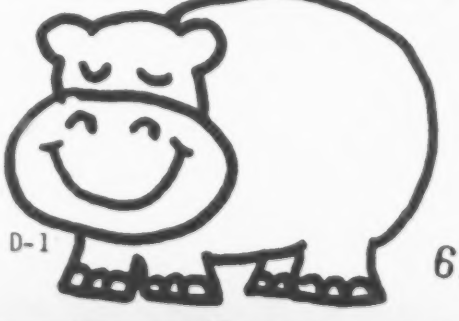
HOWARD HIPPO
(Money)

Objective: The student will be able to recognize the value of specific coins as demonstrated by counting various coins to equal a given amount.

How to Make: Using the pattern given, make a hippo from construction paper. Add features and laminate with clear contact paper. Cut out several cards approximately 3 x 4 inches and on each card draw a picture of something that can be bought. Examples: candy kite, ball, etc. On each card print a price that the object can be purchased for. Cover the cards with clear contact paper.

Student's Directions: Howard Hippo likes to go shopping. Look at the items for sale on the cards and count out real coins to equal the price of each item.





MONKEY BUSINESS

(Addition)

Objective: The student will be able to correctly add three numbers together.

How To Make: Using pattern provided, make a monkey from poster board or other heavy material. Add features and cover him with clear contact paper. Attach a hook to each hand. You can purchase self adhesive hooks or a paper clip can be unbent to make a hook. Now cut out several banana shapes from yellow construction paper. On half of the bananas print math addition problems using three numbers. On the other half of the bananas print the answers to the problems. Make a hole at the top of all the bananas. Cover with clear contact paper.

Student's Direction: Place all the bananas with addition problems in one pile and all the ones with answers in another pile. Hang a banana with an addition problem in one hand of the monkey and in the other hand hang the banana that is the correct answer to the problem.

****

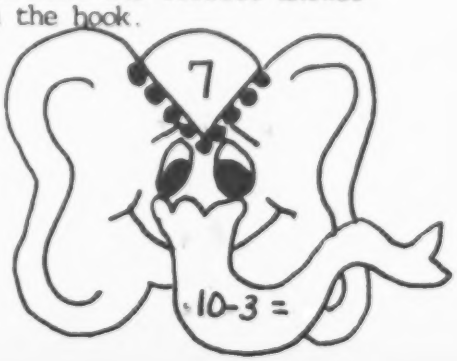
ABSENT MINDED ELEPHANT

(Subtraction)

Objective: The students will be able to correctly answer subtraction problems.

How to Make: Using pattern given, make an elephant head, add features, and cover with clear contact paper. Attach a hook on the headpiece of the elephant and another on the elephant's trunk. Now cut out several headpieces and trunks. On the trunks place subtraction problems and on the headpieces place corresponding answers. Cover with clear contact.

Student's Directions: This elephant is very absent minded. He even forgets his trunk. Help him find the correct trunk. Place a trunk on the hook on his nose, read the subtraction problem and find the correct answer on a headpiece. Place the correct answer on the hook.



KANGAROO TIME
(Telling time)

Objective: The student will be able to correctly show a given time on a clock.

How to make: Using the pattern given, make a kangaroo, add features and cover with clear contact paper. Make a slot in the kangaroo's pouch that is about one inch tall and three inches apart. Make a strip using poster board and on the strip print times, examples 1:00, 1:30, 1:45, etc. Place the strip in the slot on the pouch of the kangaroo. Now make a clock with movable hands.

Student's Directions: Pull the strip until a time shows in the slot on the kangaroo's pouch. Look at the time and show that time on the clock by moving the long hand and short hand to the correct time.

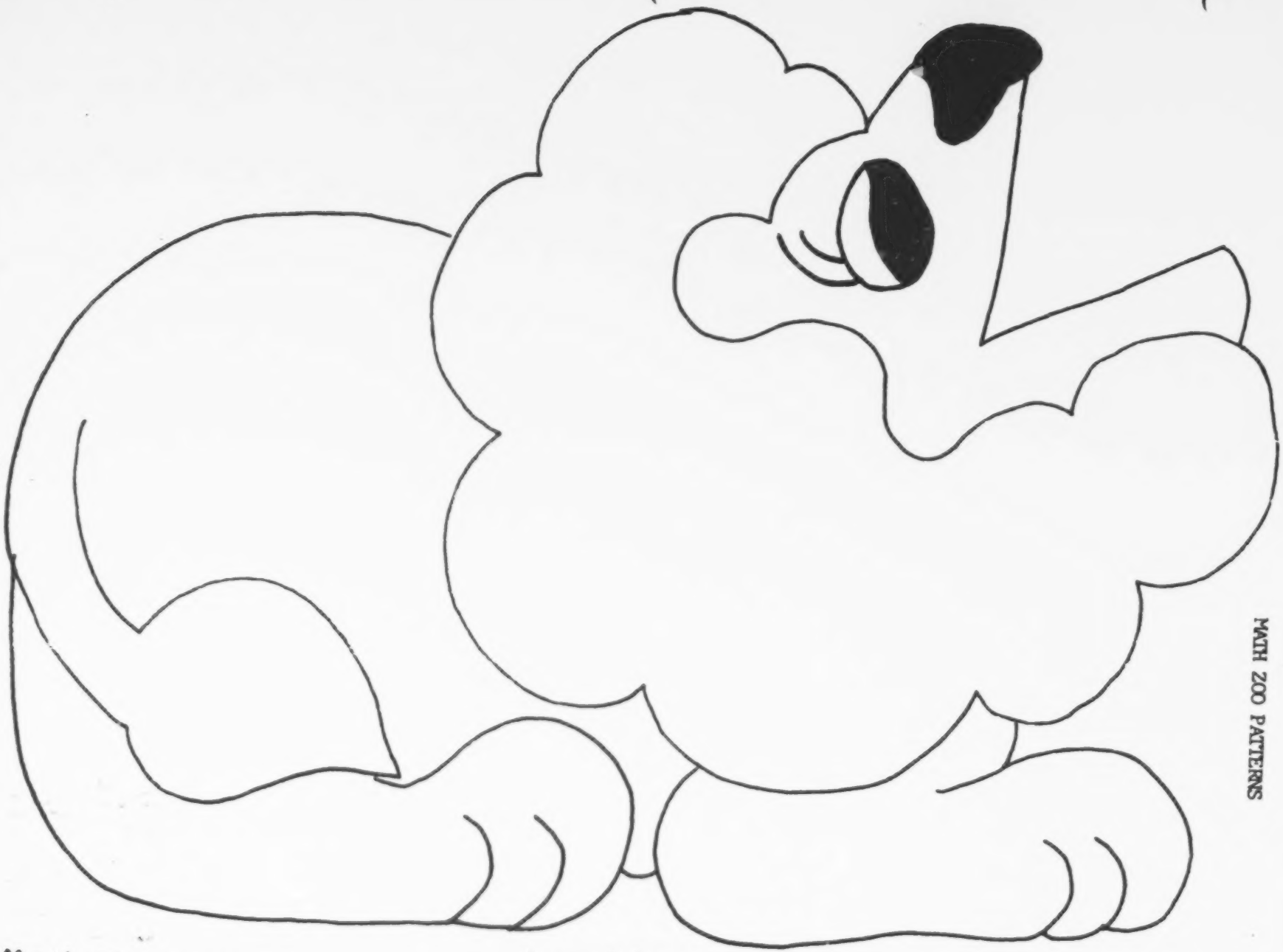
****

Leo the Lion
(Money)

Objective: The student will be able to recognize the value of various coins as demonstrated by counting coins to reach a specific value.

How to Make: Using pattern given, cut out a lion, add features and cover with clear contact paper. Make a circle from poster board and place different money values on the circle. Attach to the lion's mouth with a paper brad so that as it turns money values show in the lion's mouth. Have available real coins for the students to practice counting.

Student's Directions: Turn the wheel in the lion's mouth until you can see a money value. Count out the correct amount of money using coins provided by the teacher.



D-5

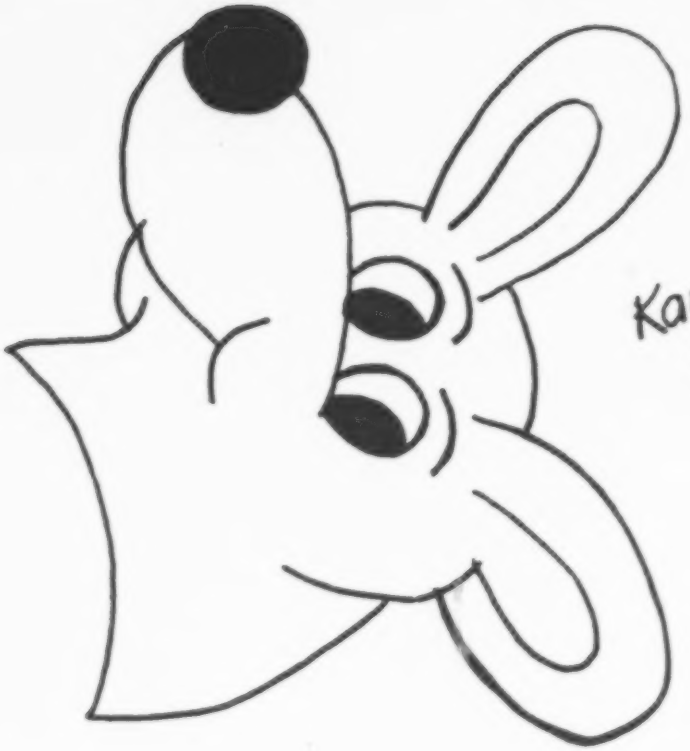
MATH ZOO PATTERNS

Math Zoo patterns
72

Leo Lion
(enlarge)

73

Kangaroo Time (enlarge)



Kangaroo Time
(enlarge)

banana for "Monkey Business"
actual size

Monkey Business
(enlarge)

0-9

77

Howard Hippo (enlarge 78)

Math Zoo Patterns

D-10

79

Math Zoo patterns

Absent-M.
Elephant
(enlarge)

80

APPENDIX E

Materials Needed To Construct Learning Centers

The following is a list of materials which would allow teachers to make the learning centers presented in this module.

Poster Board
Colored Contact Paper
Wall Paper Sample Books
Clear Contact Paper
Masking Tape
Velcro
Permanent Markers
Flair Pen
Scissors
Pencil
Rubber Cement
Elmers School Glue or Glue-All
Cup Hooks With Stick-On Backs
Yarn
Colored or Manila Folders
Boxes to Hold 8½ x 11" Papers
Worksheets
Craft Sticks
Stick-On Letters and Numbers of Various Sizes
Index Cards (3x5)
Construction Paper of Various Colors
Plastic Gallon Milk Jug(s) - Empty
Bag of Peanuts in the Shell
Mail Order Christmas Catalog
Several Deep, Narrow Cardboard Boxes
Square, Flat Cardboard Boxes
Paper Brads
Heavy Cardboard Circle (Pizza Carry-Out Cardboard Circle)
Small Manila envelopes or baggies for storage of activities
Hole Punch

APPENDIX F

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